

Stem Cell Antibodies



Abgent: your partner in stem cell research

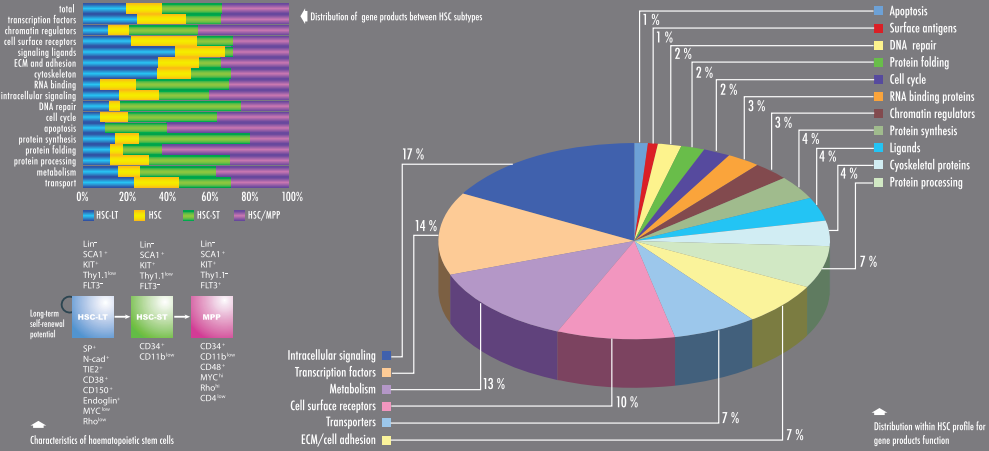
At Abgent, unsurpassed production capabilities translate into an extensive collection of antibodies focused on stem cell research, including popular targets such as SOX2, ALDH, OCT4, c-KIT, and NANOG, as well as the most recently discovered targets.

Stem cells are actively dividing pluripotent cells that retain the capacity to differentiate under the right conditions into specialized post-mitotic cell types. In the absence of the specific triggers that are needed for a stem cell to differentiate into a skin, heart, or lung cell, or any other specialized cell types, it maintains itself in a state of long-term self-renewal via mitotic division. Because of their unique properties of self-regeneration and differentiation, stem cells are being evaluated as therapeutics for diseases such as neurodegenerative or muscular diseases, cancers, and others. Pressing questions in this rapidly evolving field concern the internal and external signals for cell differentiation and the specificity of such signals for differentiation into particular cell types. While individual transcription factors such as OCT4 and specific stem cell markers such as SOX2 have been characterized, the next step in stem cell research is to identify the hundreds of other genes that either play a critical role in stem cell biology, or are uniquely impacted within the stem cell environment. Abgent's unsurpassed production capabilities and flexibility ensure access to the most state-of-the-art stem cell markers for your research.

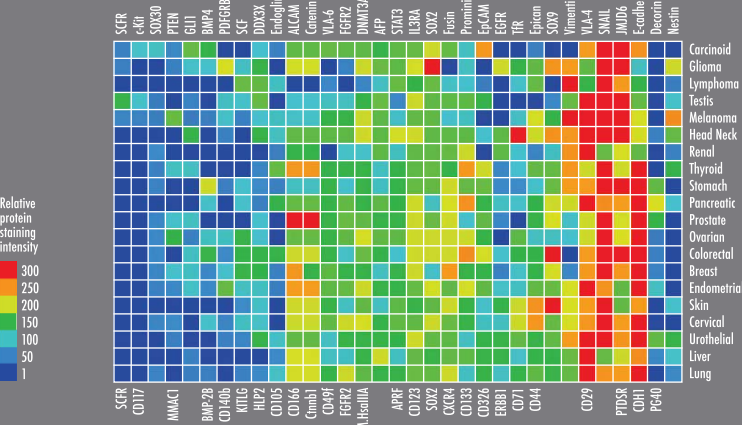
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Stem Cell Distribution



Stem Cell Cancer Profile



The images above are from the Abgent Stem Cell Protein Survey wall chart, an overview of stem cell distribution, associations, and profiling. Request a FREE copy at www.abgent.com.

Key Stem Cell Markers

Abgent has one of the most extensive antibody collections of key stem cell markers. From OCT4, NANOG, and SOX9, Abgent's premium selection serves as a vital tool for stem cell research.

CAT. #	ANTIBODY	HOST	ISO	APP.	REACT.
1	AP1465c ALDH1A1 (Center)	Rb	plg	WB, IHC, IF, FC, E	H
2	AP1482d CD9 (Center)	Rb	plg	WB, IF, FC, E	H
3	AP7656a c-KIT (N-term)	Rb	plg	WB, IHC, FC, E	H, Pr
	AP1467c Latexin (Center)	Rb	plg	WB, IHC, FC, E	H
4	AP1485c LIN28B (Center)	Rb	plg	WB, IHC, IF, FC, E	H
5	AP1486c NANOG (Center)	Rb	plg	WB, IHC, IF, FC, E	H
6	AP2021a NEUROD1	Rb	plg	WB, IHC, IF, E	H
7	AP2020d Nestin (S1409)	Rb	plg	WB, IHC, FC, E	H
8	AP13842a POU2F2 (N-term)	Rb	plg	WB, E	H
9	AP2046a OCT4 (OCT3) (N-term)	Rb	plg	WB, IF, E	H
10	AM2048a SOX2	Ms	mlgG1	WB, IHC, IF, FC, E	H
11	AP1409a SOX9 (N-term)	Rb	plg	WB, IHC, IF, E	H
12	AP2739c Vimentin (Center)	Rb	plg	WB, IHC, E	H

1

WB analysis of 293 cell lysates either non-transfected (lane 1) or transiently transfected with an exogenous ALDH1A1 gene (lane 2) using the ALDH1A1 (Center) pAb.

2

FC analysis of Jurkat cells using CD9 (Center) pAb.

3

WB analysis using the c-KIT (N-term) pAb of serum-starved HeLa cell lysate (lane 1) and primate testis tissue lysate (lane 2).

4

IHC analysis of human testis tissue stained with the LIN28B (Center) pAb.

5

IF analysis of HeLa cells with NANOG (Center) pAb.

6

IF analysis of ES cells transfected with mouse NeuroD1 stained with the NeuroD1 pAb. (Kindly supplied by Sally Lowell, Edinburgh University, Edinburgh, UK).

7

FC analysis of HepG2 cells using the Nestin (S1409) pAb.

8

WB analysis of ZR-75-1 cell lysates with the POU2F2 (N-term) pAb.

9

WB analysis of A375 cell lysates with the OCT4 (OCT3) (N-term) pAb.

10

Confocal IF analysis of MCF-7 cells with the SOX2 mAb (green). Actin filaments have been labeled with phalloidin (red) and DAPI was used as a counterstain (blue).

11

IHC analysis of human prostate carcinoma tissue with the SOX9 (N-term) pAb.

12

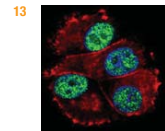
WB analysis of 293 cell lysates either non-transfected (lane 1) or transiently transfected with an exogenous Vimentin gene (lane 2) using the Vimentin (Center) pAb.

SOX2 Antibodies

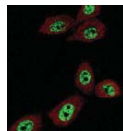
SRY (sex determining region Y)-box 2, also known as SOX2, is a transcription factor that is essential to maintain self-renewal of undifferentiated embryonic stem cells. SOX2 is one of the key transcription factors required in induced pluripotent stem cells. The primary role of SOX2 in induced pluripotent stem cells is controlling OCT4 expression, and these cells perpetuate their own expression when expressed concurrently.

Abgent has a large selection of high quality SOX2 antibodies tested in a variety of applications. Provided here is a select listing of our best SOX2 antibodies. For a full listing visit www.abgent.com.

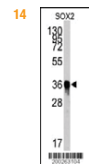
	CAT. #	ANTIBODY	HOST	ISO	APP.	REACT.
13	AM2048a	SOX2	Ms	mlgG1	WB, IHC, IF, FC, E	H
14	AM2048b	SOX2 (Ascites)	Ms	mlgG1	WB, IHC, FC, E	H
15	AP2048d	SOX2 (N-term)	Rb	plg	WB, IHC, IF, FC, E	H
	AP3737a	Phospho-SOX2 (pS250)	Rb	plg	IHC, FC, DB, E	H



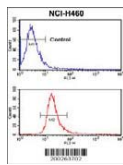
Confocal IF analysis of MCF-7 cells with the SOX2 mAb (green). Actin filaments have been labeled with phalloidin (red) and DAPI was used as a counterstain (blue).



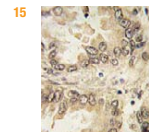
Confocal IF analysis of U-251MG cells with the SOX2 mAb (green). Actin filaments have been labeled with phalloidin (red).



WB analysis of lysates of cells expressing a recombinant SOX2 protein using the SOX2 mAb.



FC analysis of NCI-H460 cells using the SOX2 mAb.



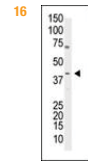
IHC analysis of human lung carcinoma tissue with the SOX2 (N-term) pAb.

OCT4 Antibodies

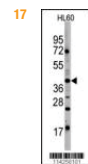
OCT4 (octamer-binding transcription factor 4) also known as POU5F1 (POU domain, class 5, transcription factor 1) is a protein that in humans is encoded by the POU5F1 gene. OCT4 is a homeodomain transcription factor of the POU family. This protein is critically involved in the self-renewal of undifferentiated embryonic stem cells. As such, it is frequently used as a marker for undifferentiated cells. OCT4 expression must be closely regulated; too much or too little will cause differentiation of the cells.

Abgent provides great selection for OCT4 antibodies. View our select list below or view our full OCT4 catalog at www.abgent.com.

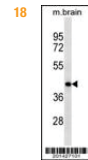
	CAT. #	ANTIBODY	HOST	ISO	APP.	REACT.
16	AP2046a	OCT4 (OCT3) (N-term)	Rb	plg	WB, IF, E	H
17	AP2046c	OCT4 (OCT3) (E125)	Rb	plg	WB, IHC, E	H
18	AM1967a	POU5F1 (Ascites)	Ms	mlgM	WB, E	H
19	AP3724a	Phospho-OCT4 (pS236)	Rb	plg	DB, E	H



WB analysis of A375 cell lysates with the OCT4 (OCT3) (N-term) pAb.



WB analysis of HL60 lysates with the OCT4 (OCT3) (E125) pAb.



WB analysis of mouse brain tissue lysates with the POU5F1 (Ascites) mAb.



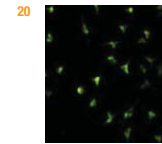
DB analysis of the Phospho-OCT4 (pS236) pAb.

NANOG Antibodies

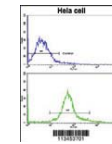
NANOG is a homeobox DNA-binding transcription factor, aptly named after the mythic Celtic land of the ever young. NANOG is expressed in embryonic stem cells and is key in maintaining their pluripotency. NANOG, in coordination with other important factors such as OCT4 and SOX2, is involved in maintaining embryonic stem cell proliferation and self-renewal and in preventing their differentiation.

Abgent's stem cell antibody portfolio includes an excellent selection of NANOG antibodies. A partial list is below and a full listing is on the Abgent website.

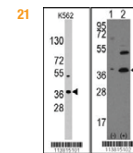
	CAT. #	ANTIBODY	HOST	ISO	APP.	REACT.
20	AP1486c	NANOG (Center)	Rb	plg	WB, IHC, IF, FC, E	H
21	AP1486a	NANOG (N-term)	Rb	plg	WB, IHC, E	H
22	AM1486b	NANOG	Ms	mlg1k	WB, E	H



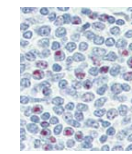
IF analysis of HeLa cells stained with the NANOG (Center) pAb.



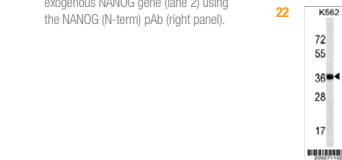
Flow cytometric analysis of HeLa cells using NANOG Antibody.



WB analysis of K562 cell line lysates using the NANOG (N-term) pAb (left panel). WB analysis of 293 cell lysates either non-transfected (lane 1) or transiently transfected with an exogenous NANOG gene (lane 2) using the NANOG (N-term) pAb (right panel).



IHC analysis of human spleen tissue with the NANOG (N-term) pAb (red). Nuclei have been counterstained with hematoxylin (blue).



WB analysis of K562 cell line lysates using the NANOG mAb.

LIN28B Antibodies

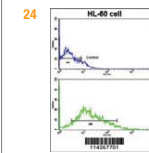
LIN28B encodes a microRNA-binding protein that binds to and enhances the translation of the IGF-2 (insulin-like growth factor 2) mRNA. LIN28B has also been shown to bind to the let-7 pre-microRNA and block its maturation. LIN28B is a marker of undifferentiated human embryonic stem cells and has been used to enhance the efficiency of the formation of induced pluripotent stem cells from human fibroblasts.

Abgent's LIN28B antibody list includes many products with peer-reviewed citations. Visit www.abgent.com for a full listing or review the list below.

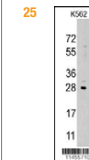
	CAT. #	ANTIBODY	HOST	ISO	APP.	REACT.
23	AP1485a	LIN28B (N-term)	Rb	plg	WB, IHC, FC, E	H
24	AP1485b	LIN28B (C-term)	Rb	plg	WB, FC, E	H
25	AP1485c	LIN28B (Center)	Rb	plg	WB, IHC, IF, FC, E	H



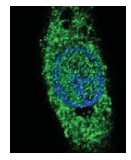
IHC analysis of human testis tissue with the LIN28B (N-term) pAb (red). Nuclei have been counterstained with hematoxylin (blue).



FC analysis of HL-60 cells using the LIN28B (C-term) pAb.



WB analysis of K562 cell line lysates using the LIN28B (Center) pAb.



Confocal IF analysis of HepG2 cells labeled with the LIN28B (C-term) pAb (green). DAPI was used as a nuclear counterstain (blue).

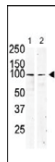
c-KIT Antibodies

The proto-oncogene c-KIT, also known as mast/stem cell growth factor receptor or CD117, is a tyrosine kinase that has been involved in the mobilization of hematopoietic progenitors. Hematopoietic progenitor cells are normally present in the blood at low levels. When they are needed at higher levels in the circulating blood, progenitors migrate from the bone marrow into the bloodstream by a process called mobilization. Signaling through c-KIT has been shown to be critical to this process.

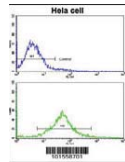
Abgent has an extensive collection of c-KIT antibodies. View our list below or go to www.abgent.com for a full portfolio.

CAT. #	ANTIBODY	HOST	ISO	APP.	REACT.
26	AP7656a	c-KIT (N-term)	Rb	plg	WB, IHC, FC, E
27	AP7656b	c-KIT (C-term)	Rb	plg	WB, E
28	AP7656h	c-KIT (C-term)	Rb	plg	WB, IHC, FC
	AP1484c	SCF (KITLG) (Center)	Rb	plg	WB, IHC, IF, FC, E

26

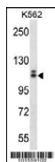


WB analysis of serum-starved HeLa cells (lane 1) and primate testis tissue lysate (lane 2) using the c-KIT (N-term) pAb.



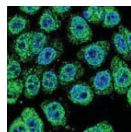
FC analysis of HeLa cells using the c-KIT (N-term) pAb.

27

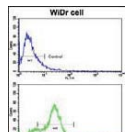


WB analysis of K562 cell line lysates using the c-KIT (C-term) pAb.

28



Confocal IF analysis of HeLa cells labeled with the SCF (KITLG) (Center) pAb (green). DAPI was used as a nuclear counterstain (blue).



FC analysis of WiDr cells using the SCF (KITLG) (Center) pAb.

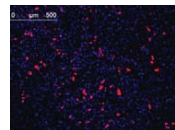
KLF4 Antibodies

In embryonic stem cells, Krüppel-like factor 4 (KLF4) has been demonstrated to be a good marker of stem cell-like capacity in terms of self-renewal and pluripotency. KLF4 is a member of the Krüppel-like family of transcription factors, paralogues to the Drosophila melanogaster Krüppel gene. Members of this family have been extensively studied for their roles in cell proliferation, differentiation, and survival, notably in the context of cancerous cells.

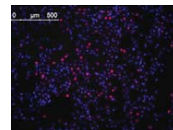
KLF4 antibodies are readily available from Abgent portfolio, which include numerous products with peer-reviewed citations. Go to www.abgent.com for a full listing.

CAT. #	ANTIBODY	HOST	ISO	APP.	REACT.
29	AM2725a	KLF4	Ms	mlgG1	WB, IF, FC, E
30	AP2725a	KLF4	Rb	plg	WB, IHC, E
	AP2725e	KLF4	Rb	plg	WB, IHC, E
	AP3652a	Phospho-KLF4 (pS245)	Rb	plg	DB, E

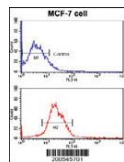
29



IF analysis of HeLa cells expressing human KLF4 labeled with the KLF4 mAb (red). DAPI was used as a nuclear counterstain (blue).

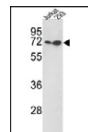


IF analysis of HeLa cells expressing mouse KLF4 labeled with the KLF4 mAb (red). DAPI was used as a nuclear counterstain (blue).

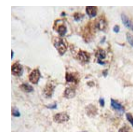


FC analysis of MCF-7 cells using the KLF4 mAb.

30



WB analysis of Jurkat (lane 1) and 293 (lane 2) cell lines with the KLF4 pAb.

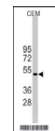


IHC analysis of human prostate carcinoma tissue using the KLF4 pAb.

Embryonic Stem Cell Antibodies

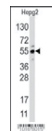
CAT. #	ANTIBODY	HOST	ISO	APP.	REACT.
	AP2730b	NANOS (C-term)	Rb	plg	WB, IHC, E
	AP2046a	OCT4 (OCT3) (N-term)	Rb	plg	WB, IF, E
31	AP1408c	SHB (Center)	Rb	plg	WB, IHC, E
	AP1464c	SNX6 (Center)	Rb	plg	WB, E
	AM2048a	SOX2	Ms	mlgG1	WB, IHC, IF, FC, E
	AP7279c	TGIF (Center L223)	Rb	plg	WB, E
	AP1406a	IRF6 (N-term)	Rb	plg	WB, E
	AP1027a	JMJD1B (N-term)	Rb	plg	WB, E
	AP1028b	JMJD2D (C-term)	Rb	plg	WB, E
	AP1022b	JMJD3 (C-term)	Rb	plg	WB, IHC, E
33	AP1030a	JMJD4 (N-term)	Rb	plg	WB, E
	AP1031a	JMJD5 (C-term)	Rb	plg	WB, E
	AP1042a	JMJD6 (N-term)	Rb	plg	WB, E
	AM2725a	KLF4	Ms	mlgG1	WB, IF, FC, E
	AM1485a	LIN28a	Ms	mlgG1 k	WB, IHC, IF, E
	AP7149a	MELK (Center)	Rb	plg	WB, E
	AP1486c	NANOG (Center)	Rb	plg	WB, IHC, IF, FC, E
33	AP1407b	NANOS1 (C-term)	Rb	plg	WB, IHC, IF, FC, E
	AP8401a	BDP1 (N-term)	Rb	plg	WB, E
	AP1482a	CD9 (N-term)	Rb	plg	WB, FC, E
	AP1483b	DDX3 (C-term)	Rb	plg	WB, IHC, E
	AP1403a	DDX4 (N-term)	Rb	plg	WB, IHC, E
34	AP1470a	ERAS (N-term)	Rb	plg	WB, IHC, IF, FC, E
	AP2064a	BMP9 (GDF2) (N-term)	Rb	plg	WB, IHC, E
	AP2066a	GDF3 (N-term)	Rb	plg	WB, IHC, E
	AP6133a	GREMLIN (C-term)	Rb	plg	WB, IHC, E

31



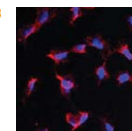
WB analysis of CEM cell lysates using the SHB (Center) pAb.

32



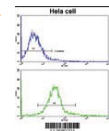
WB analysis of HepG2 cell lysates using the JMJD4 (N-term) pAb.

33



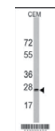
IF analysis of HeLa cells stained with the NANOS1 (C-term) pAb (red). DAPI was used as a nuclear counterstain (blue).

34



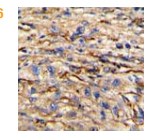
FC analysis of HeLa cells using the ERAS (N-term) pAb.

35



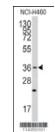
WB analysis of CEM cell lysates with the BAX1 (C-term) pAb.

36



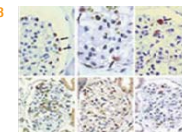
IHC analysis of human hepatocarcinoma using the NESTIN (S1409) pAb.

37



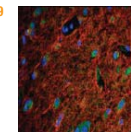
WB analysis of NCI-H460 cell lysates with the SOX1 (Center) pAb.

38



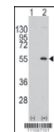
IHC analysis of human hepatocarcinoma using the BMPR1A (C-term) pAb.

39



IF analysis of cryosections of human brain tissues using the BMPR2 (N-term) pAb (red). Hoechst 33258 was used as a nuclear counterstain (blue). (Kindly supplied by Chungqing Zhang, Third Military Medical University, Chongqing, China).

40



WB analysis of 293 cell lysates either non-transfected (lane 1) or transiently transfected with an exogenous MEF2C gene (lane 2) using the MEF2C (S387) pAb.

Hematopoietic Stem Cell Antibodies

	CAT. #	ANTIBODY	HOST	ISO	APP.	REACT.
	AP6294a	CD14 (N-term)	Rb	plg	WB, IHC, E	H
41	AP1494a	CD19 (N-term)	Rb	plg	WB, IHC, IF, FC, E	H
	AP1620a	CD45 (C-term)	Rb	plg	WB, IHC, FC, E	H
	AP1431c	CD93 (C-term)	Rb	plg	WB, FC, E	h
42	AP7656a	c-KIT (N-term)	Rb	plg	WB, IHC, FC, E	H, Pr
	AJ1552a	NOTCH1	Rb	mlg	WB, IHC, ICC	H, M
43	AP6220a	NOTCH3 (C-term)	Rb	plg	WB, IHC, IF	H
	AP6290a	VEGF1 (N-term)	Rb	plg	WB, IHC, E	H
	AP6293a	VEGFB (VEGF2) (N-term)	Rb	plg	WB, IHC, E	H
	AM1100a	VEGF3	Ms	mlgG1	WB, E	H, M
	AM1101a	VEGF4	Ms	mlgG1	WB, E	H, M

Additional Stem Cell Antibodies

	CAT. #	ANTIBODY	HOST	ISO	APP.	REACT.
	AP6294a	CD14 (N-term)	Rb	plg	WB, IHC, E	H
	AP1490c	ABCG2 (BCRP) (Center)	Rb	plg	WB, IHC, E	H
	AP6020d	ACE2 (Center)	Rb	plg	WB, IHC, FC, E	H
44	AP1936c	ACO2 (Center)	Rb	plg	WB, IHC, E	H, M, R
	AP2523a	ACOX1 (N-term)	Rb	plg	WB, IHC, E	H, M
	AP1491c	ACTb/ACTC (Center)	Rb	plg	WB, IHC, E	H
	AP7102c	ACVR1C (Center E271)	Rb	plg	WB, E	H
	AP1492b	ADAM17 (C-term)	Rb	plg	WB, E	H
45	AP2748b	ADCY2 (C-term)	Rb	plg	WB, IHC, E	H
	AP1430c	AFP (Center)	Rb	plg	WB, IHC, E	H

Additional Stem Cell Antibodies (cont.)

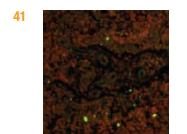
	CAT. #	ANTIBODY	HOST	ISO	APP.	REACT.
	AP2733b	AHCY (C-term)	Rb	plg	WB, IHC, E	H
	AP2734b	AKR1A1 (C-term)	Rb	plg	WB, IHC, E	H
	AP1432c	ALDH2 (Center)	Rb	plg	WB, IHC, E	H
	AP1468b	ALDH3A2 (C-term)	Rb	plg	WB, E	H
	AP1472a	ALDH5A1 (N-term)	Rb	plg	WB, IHC, FC, E	H
	AP1479b	ALDH8A1 (C-term)	Rb	plg	WB	H, M
46	AP2726a	ALDOA (N-term)	Rb	plg	WB, IHC, IF, E	H
	AP1480c	ALPI (Center)	Rb	plg	WB, E	H
	AP7111c	AMHR2 (C-term)	Rb	plg	WB, FC	H
	AT1167a	APOC1 (M01)	Ms	mlgG1k	WB, E	H
	AP2713c	ARHGEF9 (Center)	Rb	plg	WB, IHC, E	H
	AP1481b	ARID3B (C-term)	Rb	plg	WB, IHC, E	H
47	AP2775a	ARMC6 (N-term)	Rb	plg	WB, IHC, E	H
	AP2702a	ATO1H (N-term)	Rb	plg	WB, E	H
	AP2771a	B2M (N-term)	Rb	plg	WB, IHC, E	H
	AP1437b	BCAS3 (C-term)	Rb	plg	WB, E	H
	AP1923b	BCCIP (C-term)	Rb	plg	WB, E	H
	AP2004d	BMPR1A (Center C180)	Rb	plg	WB, IHC, E	H, M
48	AP2012b	CCBP2 (C-term)	Rb	plg	WB, IHC, E	H, M
	AP2782a	CCDC5 (N-term)	Rb	plg	WB, IHC, E	H
	AP1494b	CD19 (C-term)	Rb	plg	WB, E	H
	AP1495a	CD3G (N-term)	Rb	plg	WB, IHC, FC, E	H
	AP1413b	CD3Z (C-term)	Rb	plg	WB, E	H
49	AP1496b	CD4 (C-term)	Rb	plg	WB, IHC, FC, E	H
	AP1414b	CDBA (C-term)	Rb	plg	WB, IHC, FC, E	H
	AP1440a	CDB8 (N-term)	Rb	plg	WB, FC, E	H

Additional Stem Cell Antibodies (cont.)

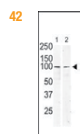
	CAT. #	ANTIBODY	HOST	ISO	APP.	REACT.
	AP1497b	CD2C (C-term)	Rb	plg	WB, E	H
	AP1447c	CDC48 (Center)	Rb	plg	WB, IHC, FC, E	H
	AP1477a	CDH1 (N-term)	Rb	plg	WB, FC, E	H
	AP1482c	CDH10 (N-term)	Rb	plg	WB, IHC, FC, E	H
	AP1473a	CDH12 (N-term)	Rb	plg	WB, IHC, E	H
50	AP1434a	CDH13 (N-term)	Rb	plg	WB, IHC, FC, E	H
	AP1435b	CDH15 (C-term)	Rb	plg	WB, IHC, E	H
	AP1498b	CDH2 (C-term)	Rb	plg	WB, FC, E	H
	AP1499b	CDH3 (C-term)	Rb	plg	WB, IHC, E	H
51	AP1401a	CDH4 (N-term)	Rb	plg	WB, IHC, IF, FC, E	H
	AP1415b	CDH6 (C-term)	Rb	plg	WB, IHC, FC, E	H
	AP1471a	CDH7 (C-term)	Rb	plg	WB, IHC, FC, E	H
52	AP1402b	CDH8 (C-term)	Rb	plg	WB, IHC, IF, FC, E	H, M
	AP1433b	CDH9 (C-term)	Rb	plg	WB, FC, E	H
	AP6131a	CDX2 (N-term)	Rb	plg	WB, IHC, E	H
	AP2727b	CEBPZ (C-term)	Rb	plg	WB, E	H
53	AP1416b	CHRD (C-term)	Rb	plg	WB, IHC, E	H
	AP1417b	CIR (C-term)	Rb	plg	WB, E	H
	AP7059b	CKB (C-term)	Rb	plg	WB, E	H, M
	AP7589a	CLIC1	Rb	plg	WB, IHC, E	H
	AP7564a	CLIC4	Rb	plg	WB, IHC, E	H
	AP1462b	CNOT4 (C-term)	Rb	plg	WB, E	H
	AP1418b	COL2A1 (C-term)	Rb	plg	WB, E	H
	AP2720b	DAAM1 (C-term)	Rb	plg	WB, IHC, E	H
	AP1483b	DDX3 (C-term)	Rb	plg	WB, IHC, E	H
54	AP1403b	DDX4 (C-term)	Rb	plg	WB, IHC, E	H
	AP2711b	DEAF1 (C-term)	Rb	plg	WB, E	H

Additional Stem Cell Antibodies (cont.)

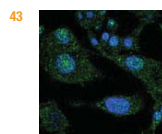
	CAT. #	ANTIBODY	HOST	ISO	APP.	REACT.
	AP1523a	DKK3 (N-term)	Rb	plg	WB, IHC, E	H
	AP6275a	DMRTA2 (N-term)	Rb	plg	WB, E	H
	AP7690a	DOK1 (N-term)	Rb	plg	WB, IHC, E	H
	AP7691a	DOK2 (N-term)	Rb	plg	WB, IHC, E	H, M
55	AP7692b	DOK4 (C-term)	Rb	plg	WB, IHC, E	H
	AP7693b	DOK5 (C-term)	Rb	plg	WB, IHC, E	H, M
	AP7659b	DOK6 (C-term)	Rb	plg	WB, IHC, E	H, M
	AP1451c	DPF2 (Center)	Rb	plg	WB, E	H
	AP1421c	YBX2 (Center)	Rb	plg	WB, E	H
	AP2714b	DTNBP1 (C-term)	Rb	plg	WB, IHC, E	H, M
	AP6137a	EDG1 (N-term)	Rb	plg	WB, E	H, M
	AP1086b	ENT1 (C-term)	Rb	plg	WB, E	H
	AP7607b	EPHA2 (C-term)	Rb	plg	WB, E	H, M
	AP7608b	EPHA3 (C-term)	Rb	plg	WB, IHC, E	H
56	AP7609a	EPHA4 (N-term)	Rb	plg	WB, IHC, IF, FC, E	H
	AM7610a	EPHA5	Rb	mlgG1k	WB, IHC, E	H
	AP7612b	EPHA7 (C-term)	Rb	plg	WB, IHC, E	H
	AP7622a	EPHB1 (C-term)	Rb	plg	WB, IHC, E	H, M
57	AM7623b	EPHB2	Rb	mlgG1k	WB, IHC, FC, E	H
	AP7624a	EPHB3 (N-term)	Rb	plg	WB, IHC, E	H
	AP1453b	EPM2A (C-term)	Rb	plg	WB, IHC, E	H
	AP7628b	EGFR (C-term)	Rb	plg	WB, IHC, E	H
	AP7630a	ERB3 (N-term)	Rb	plg	WB, IHC, FC, E	H, M
	AP2716c	HERV (Center)	Rb	plg	WB, E	H
	AP1427b	EVX2 (C-term)	Rb	plg	WB, E	H, M
58	AP6379a	FGF1 (N-term)	Rb	plg	WB, IHC, IF, E	H
	AP1436c	FRAT1 (Center)	Rb	plg	WB, IHC, E	H



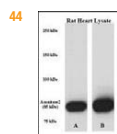
IF analysis of paraffin-sectioned human lymph tissue using the CD19 (N-term) pAb.



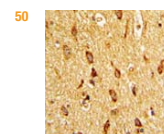
WB analysis using the c-KIT (N-term) pAb of serum-starved HeLa cell lysate (lane 1) and primate testis tissue lysate (lane 2).



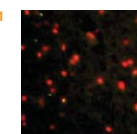
Confocal IF of HepG2 cell using the NOTCH3 (C-term) pAb (green). DAPI was used to stain the nuclei of the cells (blue).



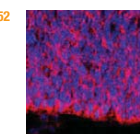
WB analysis of mouse heart tissue lysate (lane 1) and 293 cell lysates (lane 2) using the ACO2 (Center) pAb.



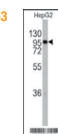
IHC analysis of human brain tissue with the CDH13 (N-term) pAb.



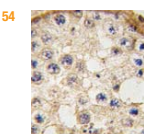
IF analysis of human brain tissue using the CDH4 (N-term) pAb.



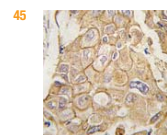
IF analysis of mouse brain tissue using the CDH8 (C-term) pAb.



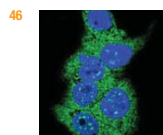
WB analysis of HepG2 cell lysates with the CHRD (C-term) pAb.



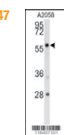
IHC analysis on human testis tissue with the DDX4 (C-term) pAb.



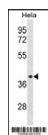
IHC analysis of human lung carcinoma using the ADCY2 (C-term) pAb.



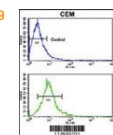
Confocal IF analysis of HepG2 cell with the ALDOA (N-term) pAb (green). Dapi was used to stain the nuclei of the cells (blue).



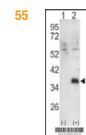
WB analysis of A2058 cell lysate using the ARMC6 (N-term) pAb.



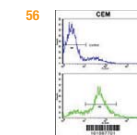
WB analysis of HeLa cell lysate using the CCBP2 (C-term) pAb.



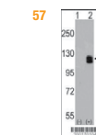
FC analysis of CEM cells using the CD4 (C-term) pAb.



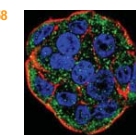
WB analysis of 293 cell lysates either non-transfected (lane 1) or transiently transfected with an exogenous DOK4 gene (lane 2) using the DOK4 (C-term) pAb.



FC analysis of CEM cells using the EPHA4 (N-term) pAb.



WB analysis of 293 cell lysates either non-transfected (lane 1) or transiently transfected with an exogenous EPHB2 gene (lane 2) using the EPHB2 mAb.



Confocal IF analysis of WDR cells labeled with the FGF1 (N-term) pAb (green). Actin filaments have been labeled with phalloidin (red) and DAPI was used to stain the nuclei (blue).

Additional Stem Cell Antibodies (cont.)

CAT. #	ANTIBODY	HOST	ISO	APP.	REACT.
AP72646a	FUCA2 (N-term)	Rb	plg	WB, IHC, E	H
AP2785a	GADD45A (N-term)	Rb	plg	WB, E	H, M
AP2062a	GDF15 (N-term)	Rb	plg	WB, IHC	H
59 AP2066a	GDF3 (N-term)	Rb	plg	WB, IHC, E	H, M
AP2068a	GDF8 (N-term)	Rb	plg	WB, IHC, E	H
AP2069a	GDF9 (N-term)	Rb	plg	WB, IHC, E	H
AP2017b	GFAF (C-term)	Rb	plg	WB, E	H, M
AP1405c	GNL3 (Center)	Rb	plg	WB, E	H
AP1461b	GNPDA1 (C-term)	Rb	plg	WB, IHC, E	H
AP6339c	GPC3 (Center)	Rb	plg	WB, IF	H, M
AP6283a	GRB2 (Y209)	Rb	plg	WB, IHC, E	H
AP2019b	ASCL1 (N-term)	Rb	plg	WB, IHC, E	H, M
60 AP7629e	ERBB2	Rb	plg	WB, IHC, IF, FC, E	H
AP7629b	ERBB2 (C-term)	Rb	plg	WB, IHC, E	H
AP6276a	HES1 (N-term T24)	Rb	plg	WB, E	H
AP8140c	HK2 (Center)	Rb	plg	WB, IHC, E	H
AP2778a	HNF4A (S142)	Rb	plg	WB, E	H
AP1442a	HNMT (N-term)	Rb	plg	WB, IHC, IF, E	H
AP7648c	HS2ST1 (Center)	Rb	plg	WB, IHC, E	H
61 AP7199b	HSPB1 (S15)	Rb	plg	WB, IHC, E	H
AP1455c	IDE (Center)	Rb	plg	WB, IHC, E	H
AP7651e	ILK (S246)	Rb	plg	WB, IHC, E	H
AP7651d	ILK1 (S259)	Rb	plg	WB, IHC, E	H
AP7651a	ILK1/ILK2 (N-term)	Rb	plg	WB, IHC, E	H
AP6284c	INA (Center)	Rb	plg	WB, IHC, E	H
AP1125b	JAK2 (C-term)	Rb	plg	WB, IF, E	H, M

Additional Stem Cell Antibodies (cont.)

CAT. #	ANTIBODY	HOST	ISO	APP.	REACT.
AP2715c	JUNCTOPHILIN3 (Center)	Rb	plg	WB, IHC, E	M
62 AP1484c	SCF (Center)	Rb	plg	WB, IHC, IF, FC, E	H
AP7296a	LAP3 (N-term)	Rb	plg	WB, IHC, E	H
AP2049b	LEFTYA (C-term)	Rb	plg	WB, E	H, M
AP1423a	LHX6 (N-term)	Rb	plg	WB, IHC, E	H, M
63 AP7250c	MAPK1 (Center)	Rb	plg	WB, IHC, E	H
AP1452c	MARCH8 (Center)	Rb	plg	WB, IHC, E	H
AP2019a	ASCL1 (N-term)	Rb	plg	WB, IHC, E	H, M
AP2767a	MCAM (Y641)	Rb	plg	WB, E	H
AP7149a	MELK (Center)	Rb	plg	WB, E	H
64 AP1454a	METTL7A (N-term)	Rb	plg	WB, IHC, E	H
AP1459a	MIPPEP (N-term)	Rb	plg	WB, IHC, E	H
AP6194a	MMP10 (C-term)	Rb	plg	WB, IHC, E	H, M
65 AP6196a	MMP12 (C-term)	Rb	plg	WB, IHC, IF, E	H, M
AP6198a	MMP14 (N-term)	Rb	plg	WB, IHC, FC, E	H
AP6200a	MMP16 (N-term)	Rb	plg	WB, IHC, E	H
AP6206a	MMP25 (C-term)	Rb	plg	WB, E	H, M
AP1407b	NANOS1 (C-term)	Rb	plg	WB, IHC, IF, FC, E	H
AP2021b	NEUROD1 (C-term)	Rb	plg	WB, E	H, M
AP2022a	NEUROG1 (N-term)	Rb	plg	WB, E	H
AP2023b	NEUROG2 (C-term)	Rb	plg	WB, E	H, M
AP2024a	NEUROG3 (N-term)	Rb	plg	WB, IHC, IF, E	H, M
AP7596d	NOMO1 (S1205)	Rb	plg	WB, E	H
AP2756a	NUMB (N-term G94)	Rb	plg	WB, E	H
AP2719a	OLFM1 (N-term)	Rb	plg	WB, IHC, E	H

Additional Stem Cell Antibodies (cont.)

CAT. #	ANTIBODY	HOST	ISO	APP.	REACT.
AP6407c	DJ-1 (Center0)	Rb	plg	WB, E	H
66 AP1720a	PDGFA (N-term)	Rb	plg	WB, IHC, E	H
AP1087a	PMAT (N-term)	Rb	plg	WB, IHC, E	H
AP6408c	PXN (Center)	Rb	plg	WB, IHC, E	H
AP1450c	PYGM (Center)	Rb	plg	WB, IHC	H
67 AP1428a	RAX (N-term)	Rb	plg	WB, IHC, E	H, M
AP1446c	SCNM1 (Center)	Rb	plg	WB, IHC, E	H
AP1408c	SHB (Center)	Rb	plg	WB, IHC, E	H
AP2053b	SLUG (N-term K9)	Rb	plg	WB, E	H
AP1443a	STC2 (N-term)	Rb	plg	WB, IHC, E	H, M
AP1448b	STK39 (C-term)	Rb	plg	WB, IHC, E	H, M
AP1441b	SWAP70 (C-term)	Rb	plg	WB, IHC, E	H
AP2047a	TDGF1 (N-term)	Rb	plg	WB, IHC, E	H
AP2760b	UGP2 (C-term)	Rb	plg	WB, IHC, E	H
68 AP2723b	WIF1 (C-term)	Rb	plg	WB, IHC, E	H
AP2015a	XLKD1 (N-term)	Rb	plg	WB, IHC, E	H, M
AP1412c	YBX2 (Center)	Rb	plg	WB, E	H
AP2761a	ZIC3 (N-term)	Rb	plg	WB, IHC, E	H
AP2722b	ZIC4 (C-term)	Rb	plg	WB, E	H

Abgent offers an expansive collection of stem cell antibodies. Visit the Abgent website for a full listing. Companion blocking peptides are available for all stem cell antibodies.

Abgent provides one of the largest selections of phospho-specific stem cell antibodies available. Visit www.abgent.com to view the full listing.

Legends

APPLICATION (APP)

DB = Phospho-specific Dot Blot

E = ELISA

IF = Immunofluorescence

IHC = Immunohistochemistry

WB = Western Blot

REACTIVITY (REACT)

H = Human

M = Mouse

Pr = Primate

ANTIBODY

mAb = Monoclonal antibody

mlg = Monoclonal immunoglobulin

pAb = Polyclonal antibody

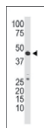
plg = Polyclonal immunoglobulin

HOST

Ms = Mouse

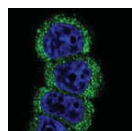
Rb = Rabbit

59



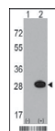
WB analysis of mouse kidney tissue lysate using the GDF3 (N-term) pAb.

60



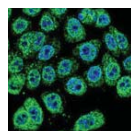
Confocal IF analysis of MCF-7 cells labeled with the ERBB2 pAb (green). DAPI was used to counterstain the cell nuclei.

61



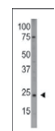
WB analysis of 293 cell lysates either non-transfected (lane 1) or transiently transfected with an exogenous HSPB1 gene (lane 2) using the HSPB1 (S15) mAb.

62



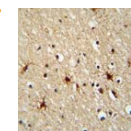
Confocal IF analysis of HeLa cells labeled with the SCF (Center) pAb. DAPI was used to counterstain the cell nuclei.

66



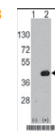
WB analysis of HL60 cell lysate using the PDGFA (N-term) pAb.

67



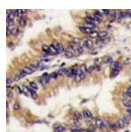
IHC analysis of human brain tissue stained with the RAX (N-term) pAb (brown). Hematoxylin was used as a nuclear counterstain (blue).

68



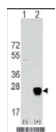
WB analysis of 293 cell lysates either non-transfected (lane 1) or transiently transfected with an exogenous WIF1 gene (lane 2) using the WIF1 (C-term) mAb.

63



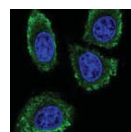
IHC analysis of human lung carcinoma tissue stained with the MAPK1 (Center) pAb (brown). Hematoxylin was used as a nuclear counterstain (blue).

64



WB analysis of 293 cell lysates either non-transfected (lane 1) or transiently transfected with an exogenous METTL7A gene (lane 2) using the METTL7A (N-term) mAb.

65



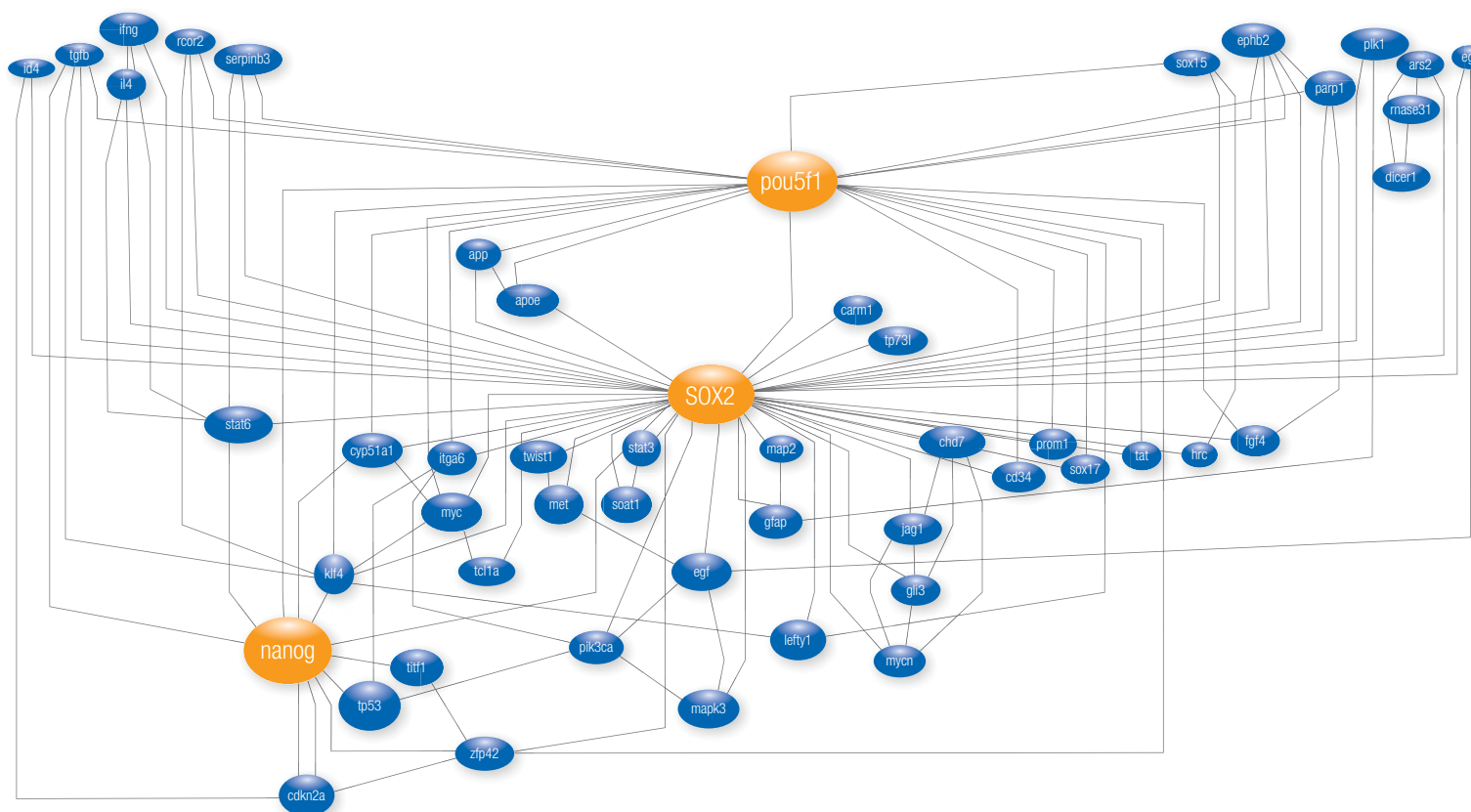
Confocal IF analysis of 293 cells labeled with the MMP12 (C-term) pAb. DAPI was used as a nuclear counterstain.

Stem Cell Literature Networks

This SOX2 network was generated using Cytoscape V2.2, with a lexically-driven XML plug-in to the Agilent Literature Search, curated and color coded in Adobe Illustrator CS5.

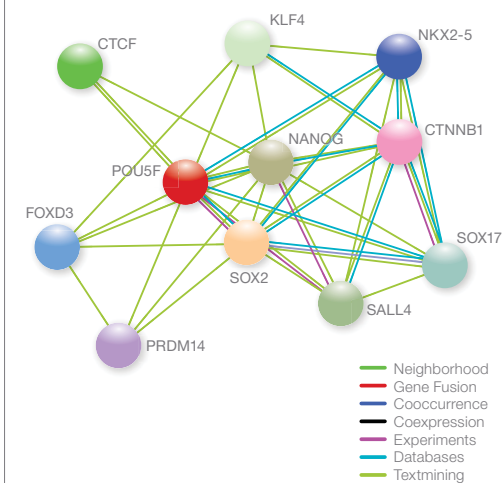
Abgent's Gene Network Discovery Team has developed a powerful technology to perform sophisticated nearest-neighbor analysis of protein associations via large-scale mining of literature abstracts.

The result is a concise visual representation of the collective findings of scores of independent scientists, distilled from hundreds of peer-reviewed publication. Presented below is the gene network centered on SOX2, an important stem cell marker. Contact Abgent today for a free custom network production centered on your gene of interest!



Signaling pathways are subnetworks of proteins that communicate via a series of interactions. We used a protein-protein interaction network compiled from the STRING database of known and predicted protein interactions. The STRING database aggregates protein-protein associations from over a dozen other pathway and protein interaction databases and combines these with computational predictions based on sequence, co-expression, literature mining, interactions between orthologous proteins, and other biological features to provide a comprehensive protein relationship resource¹⁾. Known physical binding interactions are weighted (scored) based on evidence from high-throughput experiments, genomic context, coexpression, and text mining. These weights (scores) allow interpretation of the array of biological features into the stem cell framework.

Scores: OCT4		Scores: SOX2		Scores: Nanog	
SOX2	0.999	POU5F1	0.999	POU5F1	0.994
NANOG	0.994	KLF4	0.994	SOX2	0.994
KLF4	0.993	NANOG	0.994	SALL4	0.993
CTCF	0.981	SMAD4	0.986	KLF4	0.993
SALL4	0.981	PAX6	0.986	ZFP42	0.972
SOX17	0.976	POU2F1	0.976	ISYNA1	0.970
FOXD3	0.976	FOX3	0.973	LIN28A	0.966
NKX2-5	0.974	ISYNA1	0.971	FAM48A	0.965
PRDM14	0.973	CTNNB1	0.970	SMAD1	0.960
CTNNB1	0.971	STAT3	0.967	GATA6	0.953



1. Szklarczyk D, Franceschini A, Kuhn M, Simonovic M, Roth A, Minguez P, Doerks T, Stark M, Müller J, Bork P, Jensen LJ, von Mering C. (2011) The STRING database in 2011: functional interaction networks of proteins, globally integrated and scored. Nucleic Acids Res. 39, D561-D568.

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