

DBX1 Antibody

Catalog # ASC11366

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	A6NMT0
Other Accession	NP_001025036 , 304434796
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	37283
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	DBX1 antibody can be used for detection of DBX1 by Western blot at 1 - 2 μ g/mL. Antibody can also be used for immunohistochemistry starting at 2.5 μ g/mL. For immunofluorescence start at 20 μ g/mL.

Additional Information

Gene ID	120237
Other Names	Homeobox protein DBX1, Developing brain homeobox protein 1, DBX1
Target/Specificity	DBX1; BX1 antibody is predicted to not cross-react with other DBX protein family members
Reconstitution & Storage	DBX1 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	DBX1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	DBX1
Function	Could have a role in patterning the central nervous system during embryogenesis. Has a key role in regulating the distinct phenotypic features that distinguish two major classes of ventral interneurons, V0 and V1 neurons. Regulates the transcription factor profile, neurotransmitter phenotype, intraspinal migratory path and axonal trajectory of V0 neurons, features that differentiate them from an adjacent set of V1 neurons (By similarity).
Cellular Location	Nucleus {ECO:0000255 PROSITE-ProRule:PRU00108}.

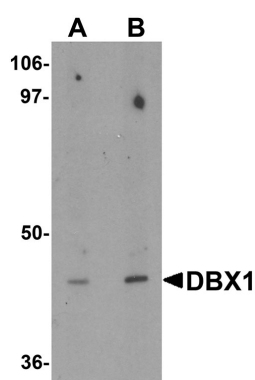
Background

DBX1 Antibody: DBX1 is implicated in patterning the central nervous system during embryogenesis. DBX1 homeodomain transcription factor is expressed in progenitors which are critical in establishing cell fate allocation and cell diversity. DBX1 has a key role in regulating the distinct phenotypic features that distinguish two major classes of ventral interneurons, V0 and V1 neurons. DBX1-derived neurons are essential for the transgenic expression and generation of respiratory behavior both in vitro and in vivo.

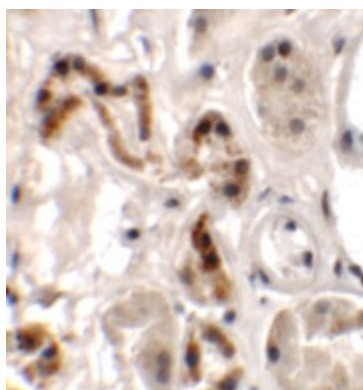
References

Griveau A, Borello U, Causeret F, et al. A novel role for Dbx1-derived Cajal-Retzius cells in early regionalization of the cerebral cortical neuroepithelium. *PLoS Biol.* 2010; 8(7):e1000440
Causeret F, Ensini M, Teissier A, et al. Dbx1-expressing cells are necessary for the survival of the Mammalian anterior neural and craniofacial structures. *PLoS One* 2011; 6:e19367.
Pierani A, Moran-Rivard L, Sunshine MJ, et al. Control of interneuron fate in the developing spinal cord by the progenitor homeodomain protein Dbx1. *Neuron* 2001; 29:367-84
Gray PA, Hayes JA, Ling GY, et al. Developmental origin of preBotzinger complex respiratory neurons. *J. Neurosci.* 2010; 30:14883-95.

Images

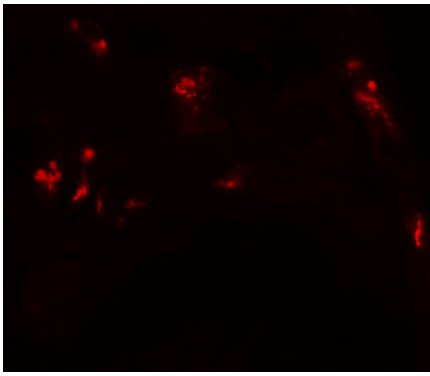


Western blot analysis of DBX1 in mouse kidney tissue lysate with DBX1 antibody at (A) 1 and (B) 2 µg/mL.



Immunohistochemistry of DBX1 in human kidney tissue with DBX1 antibody at 2.5 µg/mL.

Immunofluorescence of DBX1 in human kidney tissue with DBX1 antibody at 20 µg/mL.



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