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LIF Antibody

Catalog # ASC11302

Product Information

Application	WB, IF, E
Primary Accession	P15018
Other Accession	NP_002300, 4504991
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	22008
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	LIF antibody can be used for detection of LIF by Western blot at 1 - 2 □g/mL. Antibody can also be used for immunofluorescence starting at 20 □g/mL.

Additional Information

Gene ID	3976
Other Names	Leukemia inhibitory factor, LIF, Differentiation-stimulating factor, D factor, Melanoma-derived LPL inhibitor, MLPLI, Emfilermin, LIF, HILDA
Target/Specificity	LIF; At least two isoforms of LIF are known to exist.
Reconstitution & Storage	LIF antibody can be stored at 4℃ for three months and -20℃, 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	LIF Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	LIF
Synonyms	HILDA
Function	LIF has the capacity to induce terminal differentiation in leukemic cells. Its activities include the induction of hematopoietic differentiation in normal and myeloid leukemia cells, the induction of neuronal cell differentiation, and the stimulation of acute-phase protein synthesis in hepatocytes.
Cellular Location	Secreted.

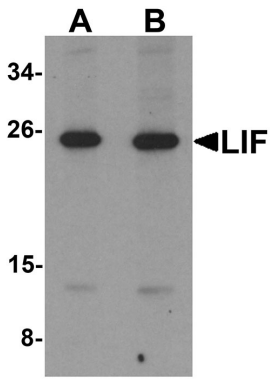
Background

LIF Antibody: LIF is a pleiotropic cytokine with roles in several different systems. It is involved in the induction of hematopoietic differentiation in normal and myeloid leukemia cells, induction of neuronal cell differentiation, regulator of mesenchymal to epithelial conversion during kidney development, and may also have a role in immune tolerance at the maternal-fetal interface. LIF was initially recognized by its ability to induce terminal differentiation of myeloid leukemic cells. It is a member of the IL-6 cytokine superfamily and can be highly glycosylated. LIF signaling is transduced through the LIF-R/gp130 receptor complex, leading to the phosphorylation and activation of the JAK/STAT pathway. Recent evidence shows that LIF inhibits cardiomyogenesis in embryonic stem cells via STAT3 activation.

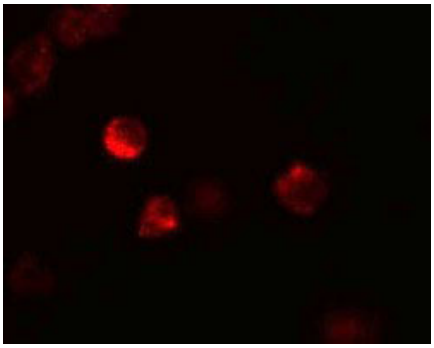
References

Trouillas M, Saucourt C, Guillotin B, et al. The LIF cytokine: towards adulthood. Eur. Cytokine Netw. 2009; 20:51-62.
Hilton DJ, Nicola NA and Metcalf D. Purification of a murine leukemia inhibitory factor from Krebs ascites cells. Anal. Biochem. 1988; 173:359-67.
Schemlzer CH, Burton LE and Tamony CM. Purification and partial characterization of recombinant human differentiation-stimulating factor. Protein Expr. Purif. 1990; 1:54-62

Images



Western blot analysis of LIF in 3T3 cell lysate with LIF antibody at (A) 1 and (B) 2 µg/mL.



Immunofluorescence of LIF in 3T3 cells with LIF antibody at 20 µg/mL.