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Goat anti-LIF Antibody

Peptide-affinity purified goat antibody
Catalog # AF4527a

Product Information

Application	IHC, FC, Pep-ELISA
Primary Accession	P15018
Other Accession	NP_002300.1
Reactivity	Human
Host	Goat
Clonality	Polyclonal
Clone Names	LIF
Calculated MW	22008

Additional Information

Gene ID	3976
Other Names	LIF; leukemia inhibitory factor (cholinergic differentiation factor); CDF; DIA; HILDA; D factor; MLPLI; OTTHUMP00000198698; cholinergic differentiation factor; differentiation inhibitory activity; differentiation stimulating factor; differentiation-induci
Dilution	IHC~~1:100~500 FC~~1:10~50 Pep-ELISA~~N/A
Format	Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin. Aliquot and store at -20°C. Minimize freezing and thawing.
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Goat anti-LIF Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	LIF (HGNC:6596)
Synonyms	HILDA
Function	Functions as a cytokine that binds to the LIF receptor complex (PubMed:11294841, PubMed:14527405, PubMed:36930708). The LIF receptor complex indeed consists of two signaling receptor subunits IL6ST/gp130 and LIFR that transduce the signal into the cell (PubMed:14527405, PubMed:36930708). Functionally, regulates cell self- renewal, differentiation

and survival of embryonic stem cells (ESCs) and is crucial for embryonic implantation (By similarity). Mechanistically, ligand binding to LIFR, induces heterodimerization with IL6ST/gp130 activating JAK tyrosine kinases (JAK1 or JAK2 and to a lesser extent TYK2) bound to their intracellular domains (PubMed:11294841). These kinases subsequently phosphorylate IL6ST/gp130 and LIFR (PubMed:11294841). The tyrosine phosphorylated signaling receptors serve in turn as docking sites for recruitment and activation of signal transducers and activators of transcription (STAT3 and to lesser extent STAT1) (PubMed:11294841). In parallel to the activation of the STAT3-pathway, the binding of LIF to the LIF receptor complex leads to the activation of the mitogen-activated protein kinase (MAPK) and the phosphatidylinositol 3-kinase (PI(3)K) pathways (PubMed:11294841). Tyrosine phosphorylation of the p85 subunit of PI(3)K by JAK1 leads to activation of the serine/ threonine kinase AKT (protein kinase B) (PubMed:11294841). PI(3)K-dependent signaling is required for efficient self-renewal of murine ES cells, and regulation of ERK activity is functionally important in this response (By similarity). Moreover, induces tyrosine phosphorylation of PTPN11, that associates with IL6ST/gp130-LIFR, which in turn recruits the p85 regulatory subunit of PI(3)K protein kinase, promoting PI3K-AKT activation, and GRB2-RAS-MAPK signaling (PubMed:11294841).

Cellular Location Secreted.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.