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Anti-Cardiotrophin-1 Antibody

Catalog # AP59528

Product Information

Application	WB, IHC
Primary Accession	Q16619
Reactivity	Human, Mouse, Rat, Mk
Host	Rabbit
Clonality	Polyclonal
Calculated MW	21227

Additional Information

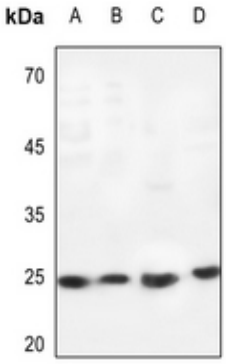
Gene ID	1489
Other Names	Cardiotrophin-1; CT-1
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human Cardiotrophin-1. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000), IHC (1/100 - 1/200) IHC~~WB (1/500 - 1/1000), IHC (1/100 - 1/200)
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

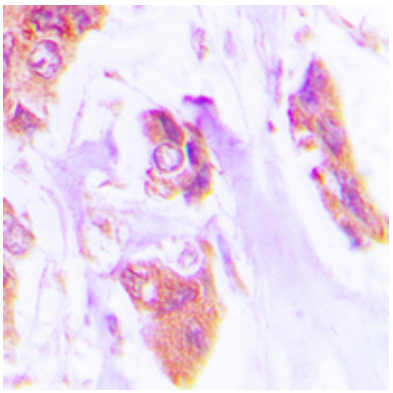
Name	CTF1 (HGNC:2499)
Function	Functions as a cytokine that binds to the LIF receptor complex (PubMed:8833032). The LIF receptor complex indeed consists of two signaling receptor subunits IL6ST/gp130 and LIFR that transduce the signal into the cell (By similarity). Functionally, acts as a potent cardiac survival factor, and promotes cardiomyocyte proliferation and hypertrophy (PubMed:8833032). 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 (By similarity). These kinases subsequently phosphorylate IL6ST/gp130 and LIFR (By similarity). The tyrosine phosphorylated signaling receptors serve in turn as docking sites for recruitment and activation of signal transducer and activator of transcription STAT3 (By similarity).
Cellular Location	Secreted.

Tissue Location	Highly expressed in heart, skeletal muscle, prostate and ovary. Lower levels in lung, kidney, pancreas, thymus, testis and small intestine. Little or no expression in brain, placenta, liver, spleen, colon or peripheral blood leukocytes

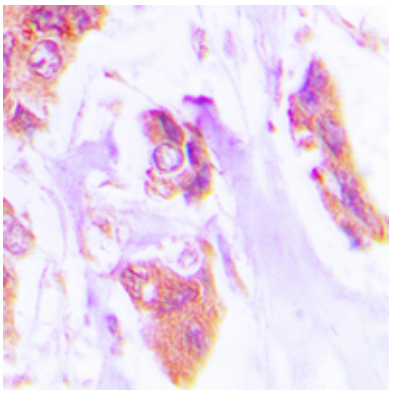
Images



Western blot analysis of Cardiotrophin-1 expression in Hela (A), mouse lung (B), rat lung (C), rat testis (D) whole cell lysates. (Predicted band size: 21 kD; Observed band size: 25 kD)



Immunohistochemical analysis of Cardiotrophin-1 staining in human lung cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunohistochemical analysis of Cardiotrophin-1 staining in human lung cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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