

LITAF Rabbit pAb

Catalog # AP97695

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	Q99732
Other Accession	Q99732
Host	Rabbit
Clonality	Polyclonal
Calculated MW	17107
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human LITAF
Epitope Specificity	1-100/161
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
DISEASE	Defects in LITAF are the cause of Charcot-Marie-Tooth disease type 1C (CMT1C) [MIM:601098]. CMT1C is a form of Charcot-Marie-Tooth disease, the most common inherited disorder of the peripheral nervous system. Charcot-Marie-Tooth disease is classified in two main groups on the basis of electrophysiologic properties and histopathology: primary peripheral demyelinating neuropathy or CMT1, and primary peripheral axonal neuropathy or CMT2. Neuropathies of the CMT1 group are characterized by severely reduced nerve conduction velocities (less than 38 m/sec), segmental demyelination and remyelination with onion bulb formations on nerve biopsy, slowly progressive distal muscle atrophy and weakness, absent deep tendon reflexes, and hollow feet. Note=Defects in LITAF may be involved in extramammary Paget disease (EMPD) carcinogenesis. EMPD is a cancerous disease representing about 8% of all malignant skin cancers; it usually appears in the anogenital area and can be fatal by metastasizing to internal organs when left untreated for a long time. The clinical features are usually those of eczematous eruptions with weeping and crust formation.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Lipopolysaccharide is a potent stimulator of monocytes and macrophages, causing secretion of tumor necrosis factor-alpha (TNF-alpha) and other inflammatory mediators. This gene encodes lipopolysaccharide-induced TNF-alpha factor, which is a DNA-binding protein and can mediate the TNF-alpha expression by direct binding to the promoter region of the TNF-alpha gene. The transcription of this gene is induced by tumor suppressor p53 and has been implicated in the p53-induced apoptotic pathway. Mutations in this gene cause Charcot-Marie-Tooth disease type 1C (CMT1C) and may be involved in the carcinogenesis of extramammary Paget's disease (EMPD). Multiple alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Oct 2008]

Additional Information

Gene ID	9516
Other Names	TNF-alpha; PIG7; SIMPLE; TP53I7; 3222402J11Rik; N4WBP3; TBX1; EET-1; LITAF_HUMAN; LITAF; LPS-induced TNF-alpha factor; Small integral membrane protein of lysosome/late endosome; p53-induced gene 7 protein; LITAF_MOUSE; LPS-induced TNF-alpha factor homolog; Estrogen-enhanced transcript protein (mEET); LITAF-like protein; NEDD4 WW domain-binding protein 3; LITAF_RAT; Estrogen-enhanced transcript protein 1 (Eet-1); lipopolysaccharide induced TNF factor; lipopolysaccharide-induced TNF factor; small integral membrane protein of the late endosome
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:500 0-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	LITAF
Function	Plays a role in endosomal protein trafficking and in targeting proteins for lysosomal degradation (PubMed: 23166352). Plays a role in targeting endocytosed EGFR and ERG3 for lysosomal degradation, and thereby helps down-regulate downstream signaling cascades (PubMed: 23166352). Helps recruit the ESCRT complex components TSG101, HGS and STAM to cytoplasmic membranes (PubMed: 23166352). Probably plays a role in regulating protein degradation via its interaction with NEDD4 (PubMed: 15776429). May also contribute to the regulation of gene expression in the nucleus (PubMed: 10200294 , PubMed: 15793005). Binds DNA (in vitro) and may play a synergistic role with STAT6 in the nucleus in regulating the expression of various cytokines (PubMed: 15793005). May regulate the expression of numerous cytokines, such as TNF, CCL2, CCL5, CXCL1, IL1A and IL10 (PubMed: 10200294 , PubMed: 15793005).
Cellular Location	Cytoplasm. Nucleus. Lysosome membrane; Peripheral membrane protein; Cytoplasmic side. Early endosome membrane. Late endosome membrane. Endosome membrane; Peripheral membrane protein; Cytoplasmic side. Cell membrane; Peripheral membrane protein; Cytoplasmic side. Golgi apparatus membrane. Note=Associated with membranes of lysosomes, early and late endosomes (PubMed:11274176, PubMed:27582497, PubMed:27927196). Can translocate from the cytoplasm into the nucleus (PubMed:15793005). Detected at Schmidt-Lanterman incisures and in nodal regions of myelinating Schwann cells (By similarity) {ECO:0000250 UniProtKB:Q9JLJ0, ECO:0000269 PubMed:11274176, ECO:0000269 PubMed:15793005, ECO:0000269 PubMed:27582497, ECO:0000269 PubMed:27927196}
Tissue Location	Ubiquitously and abundantly expressed. Expressed predominantly in the placenta, peripheral blood leukocytes, lymph nodes and spleen.

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