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# LITAF Rabbit pAb

Catalog # AP97695

## Product Information

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| **Application** | IHC-P, IHC-F, IF, E |
| **Primary Accession** | Q99732 |
| **Other Accession** | Q99732 |
| **Reactivity** | Bat, Elephant |
| **Predicted** | Rat, Pig, Human, Mouse, Rabbit, Chicken, Horse, Sheep, Opossum |
| **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 suppresor 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

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| **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=1:5000-10000 |
| **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

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| **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 ERGG3 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. |

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