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LRRC33 Rabbit pAb

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Catalog # AP57070

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q86YC3
Reactivity	Mouse, Rat
Predicted	Human, Rabbit
Host	Rabbit
Clonality	Polyclonal
Calculated MW	76366
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human LRRC33
Epitope Specificity	501-600/692
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Membrane; Single pass type I membrane protein.
SIMILARITY	Contains 21 LRR (leucine-rich) repeats.
SUBUNIT	Interacts with CYBB/NOX2; the interaction is direct By similarity. Interacts (via LRR repeats) with TLR2, TLR3, TLR4, TLR9 and probably other Toll-like receptors.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	LRRC33 is a 692 amino acid protein that contains 17 LRR repeats. The gene encoding LRRC33 maps to chromosome 3, which encodes over 1,100 genes. Particular regions of the chromosome 3 short arm are deleted in many types of cancer cells. Marfan syndrome, porphyria, von Hippel-Lindau syndrome, osteogenesis imperfecta and Charcot-Marie-Tooth disease are a few of the numerous genetic diseases associated with chromosome 3.

Additional Information

Gene ID	375387
Other Names	Transforming growth factor beta activator LRRC33, Leucine-rich repeat-containing protein 33, Negative regulator of reactive oxygen species, NRROS (HGNC:24613)
Target/Specificity	Ubiquitous, with high level of expression found in bone marrow, thymus, liver, lung, intestine and spleen.
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
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 NRROS (HGNC:24613)

Function Key regulator of transforming growth factor beta-1 (TGFB1) specifically required for microglia function in the nervous system (By similarity). Required for activation of latent TGF-beta-1 in macrophages and microglia: associates specifically via disulfide bonds with the Latency-associated peptide (LAP), which is the regulatory chain of TGFB1, and regulates integrin-dependent activation of TGF- beta-1 (By similarity). TGF-beta-1 activation mediated by LRRC33/NRROS is highly localized: there is little spreading of TGF-beta-1 activated from one microglial cell to neighboring microglia, suggesting the existence of localized and selective activation of TGF-beta-1 by LRRC33/NRROS (By similarity). Indirectly plays a role in Toll-like receptor (TLR) signaling: ability to inhibit TLR-mediated NF-kappa-B activation and cytokine production is probably a consequence of its role in TGF-beta-1 signaling (PubMed:23545260).

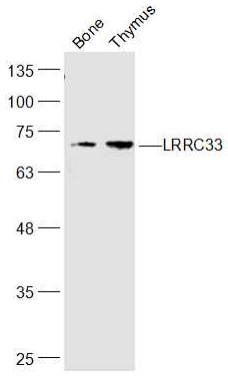
Cellular Location Cell membrane; Single-pass type I membrane protein. Endoplasmic reticulum membrane; Single-pass type I membrane protein

Tissue Location Mainly expressed in cells of hematopoietic origin (PubMed:29909984). Highly expressed in bone marrow, thymus, liver, lung, intestine and spleen (PubMed:23545260). In the brain, highly expressed in microglia (PubMed:32100099).

Background

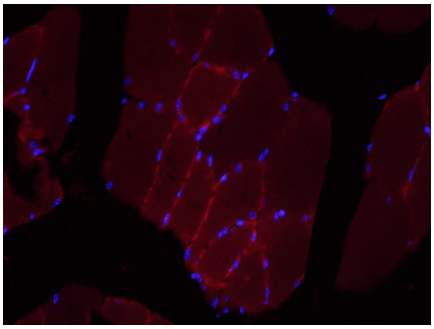
LRRC33 is a 692 amino acid protein that contains 17 LRR repeats. The gene encoding LRRC33 maps to chromosome 3, which encodes over 1,100 genes. Particular regions of the chromosome 3 short arm are deleted in many types of cancer cells. Marfan syndrome, porphyria, von Hippel-Lindau syndrome, osteogenesis imperfecta and Charcot-Marie-Tooth disease are a few of the numerous genetic diseases associated with chromosome 3.

Images



Sample:
Bone(Rat) Cell Lysate at 40 ug
Thymus(Rat) Cell Lysate at 40 ug
Primary: Anti-LRRC33 (AP57070) at 1/300 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 74 kD
Observed band size: 74 kD

Paraformaldehyde-fixed, paraffin embedded (Mouse skeletal muscle); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous



peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (LRRC33) Polyclonal Antibody, Unconjugated (AP57070) at 1:400 overnight at 4°C, followed by a conjugated secondary antibody (AP57070-cy3) for 90 minutes, and DAPI for nuclei staining.

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