

C13orf31 antibody - middle region

Rabbit Polyclonal Antibody Catalog # AI13513

Product Information

Application WB Primary Accession Q8IV20

Other Accession <u>NM 153218, NP 694950</u>

Reactivity Human, Mouse, Rat, Rabbit, Pig, Dog, Guinea Pig, Horse, Bovine

Predicted Human, Mouse, Rat, Chicken, Dog, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 47780

Additional Information

Gene ID 144811

Alias Symbol DKFZp686D11119, FLJ38725, C13orf31, RP11-5G9.2
Other Names Laccase domain-containing protein 1, LACC1, C13orf31

Format Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium

azide and 2% sucrose.

Reconstitution & Storage Add 50 ul of distilled water. Final anti-C13orf31 antibody concentration is 1

mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at

20°C. Avoid repeat freeze-thaw cycles.

Precautions C13orf31 antibody - middle region is for research use only and not for use in

diagnostic or therapeutic procedures.

Protein Information

Name LACC1 {ECO:0000303 | PubMed:25220867,

ECO:0000312 | HGNC:HGNC:26789}

Function Purine nucleoside enzyme that catalyzes the phosphorolysis of adenosine,

guanosine and inosine nucleosides, yielding D-ribose 1- phosphate and the

respective free bases, adenine, guanine and hypoxanthine (PubMed:31978345). Also catalyzes the phosphorolysis of S-

methyl-5'-thioadenosine into adenine and S-methyl-5-thio-alpha-D-ribose 1-phosphate (PubMed:31978345). Also has adenosine deaminase activity (PubMed:31978345). Acts as a regulator of innate immunity in macrophages by modulating the purine nucleotide metabolism, thereby regulating the

metabolic function and bioenergetic state of macrophages

(PubMed:31978345). Enables a purine nucleotide cycle between adenosine

and inosine monophosphate and adenylosuccinate that prevents cytoplasmic acidification and balances the cytoplasmic-mitochondrial redox interface (PubMed:31978345). The purine nucleotide cycle consumes aspartate and releases fumarate in a manner involving fatty acid oxidation and ATP-citrate lyase activity (PubMed:31978345). Participates in pattern recognition receptor (PRR)-induced cytokines in macrophages: associates with the NOD2-signaling complex and promotes optimal NOD2-induced signaling, cytokine secretion and bacterial clearance (PubMed:28593945, PubMed:31875558). Localizes to the endoplasmic reticulum upon PRR stimulation of macrophages and associates with endoplasmic reticulum-stress sensors, promoting the endoplasmic reticulum unfolded protein response (UPR) (PubMed:31875558). Does not show laccase activity (PubMed:27959965, PubMed:31978345).

Cellular Location

Cytoplasm {ECO:0000250|UniProtKB:Q8BZT9}. Nucleus

{ECO:0000250 | UniProtKB:Q8BZT9}. Endoplasmic reticulum. Peroxisome. Note=Upon stimulation of the pattern- recognition receptor (PRR) NOD2,

localizes to the endoplasmic reticulum.

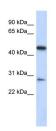
Tissue Location

Ubiquitously expressed, with higher expression levels in immune-related tissues such as lymph nodes and spleen (PubMed:27959965). Expressed in both intestinal and peripheral myeloid- derived cells (PubMed:28593945).

References

Ota T.,et al.Nat. Genet. 36:40-45(2004). Dunham A.,et al.Nature 428:522-528(2004). Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.

Images



WB Suggested Anti-C13orf31 Antibody Titration: 0.2-1

μg/ml

ELISA Titer: 1:1562500

Positive Control: Human Lung

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