

9030625A04Rik antibody - C-terminal region

Rabbit Polyclonal Antibody Catalog # Al13514

Specification

9030625A04Rik antibody - C-terminal region - Product Information

Application WB

Primary Accession Q8BZT9
Other Accession NM 1724

Other Accession

Reactivity

NM_172488, NP_766076

Human, Mouse, Rat, Rabbit, Pig, Horse,

Bovine, Guinea Pig, Dog

Predicted Human, Mouse, Rat, Rabbit, Pig, Horse,

Bovine, Guinea Pig, Dog

Host Rabbit
Clonality Polyclonal
Calculated MW 47kDa KDa

9030625A04Rik antibody - C-terminal region - Additional Information

Gene ID 210808

Alias Symbol Lacc1, 9030625A04Rik

Other Names

Laccase domain-containing protein 1, Lacc1

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-9030625A04Rik 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

9030625A04Rik antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

9030625A04Rik antibody - C-terminal region - Protein Information

Name Lacc1 {ECO:0000312|MGI:MGI:2445077}

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 (By similarity). Also catalyzes the phosphorolysis of S- methyl-5'-thioadenosine into adenine and S-methyl-5-thio-alpha-D-ribose 1-phosphate (By similarity). Also has adenosine deaminase activity (By similarity). 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:27478939, 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-induced cytokines in macrophages: associates with the NOD2-signaling complex and promotes optimal NOD2-induced signaling, cytokine secretion and bacterial clearance (By similarity). 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) (By similarity). Does not show laccase activity (By similarity).

Cellular Location

Cytoplasm. Nucleus. Endoplasmic reticulum {ECO:0000250|UniProtKB:Q8IV20}. Peroxisome {ECO:0000250|UniProtKB:Q8IV20}. Note=Upon stimulation of the pattern- recognition receptor (PRR) NOD2, localizes to the endoplasmic reticulum. {ECO:0000250|UniProtKB:Q8IV20}

Tissue Location

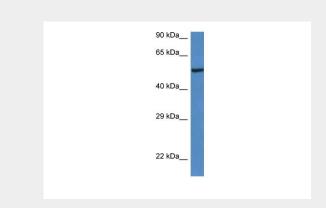
Predominantly expressed in myeloid cells (PubMed:30510070). Highly expressed in primary macrophages and dendritic cells sorted from the peritoneum or spleen, respectively (at protein level) (PubMed:30510070).

9030625A04Rik antibody - C-terminal region - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

9030625A04Rik antibody - C-terminal region - Images



WB Suggested Anti-9030625A04Rik Antibody Titration: 1.0 μg/ml

Positive Control: Mouse Heart



9030625A04Rik antibody - C-terminal region - References

Carninci P., et al. Science 309:1559-1563(2005).