10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Nprl3 (mouse) Antibody (internal region, N-Term)

Peptide-affinity purified goat antibody
Catalog # AF3659a

Specification

Nprl3 (mouse) Antibody (internal region, N-Term) - Product Information

Application	**WB**
Primary Accession	Q12980
Other Accession	NP_853547.1, 8131, 17168 (mouse), 360505 (rat)
Reactivity	**Human**
Predicted	**Mouse, Rat**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**0.5 mg/ml**
Isotype	**IgG**
Calculated MW	**63605**

Nprl3 (mouse) Antibody (internal region, N-Term) - Additional Information

Gene ID 8131

Other Names
Nitrogen permease regulator 3-like protein, -14 gene protein, Alpha-globin regulatory element-containing gene protein, Protein CGTHBA, NPRL3, C16orf35, CGTHBA, MARE

Format
0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Nprl3 (mouse) Antibody (internal region, N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

Nprl3 (mouse) Antibody (internal region, N-Term) - Protein Information

Name NPRL3 {ECO:0000303|PubMed:26505888, ECO:0000312|HGNC:HGNC:14124}

Function
As a component of the GATOR1 complex functions as an inhibitor of the amino acid-sensing branch of the mTORC1 pathway (PubMed:23723238, PubMed:29590090, PubMed:35338845). In response to amino acid depletion, the GATOR1 complex has

GTPase activating protein (GAP) activity and strongly increases GTP hydrolysis by RagA/RRAGA (or RagB/RRAGB) within heterodimeric Rag complexes, thereby turning them into their inactive GDP-bound form, releasing mTORC1 from lysosomal surface and inhibiting mTORC1 signaling (PubMed:23723238, PubMed:29590090, PubMed:35338845). In the presence of abundant amino acids, the GATOR1 complex is negatively regulated by GATOR2, the other GATOR subcomplex, in this amino acid-sensing branch of the TORC1 pathway (PubMed:23723238).

Cellular Location
Lysosome membrane. Note=Localization to lysosomes is mediated by the KICSTOR complex and is amino acid-independent.

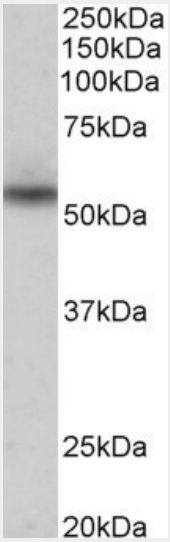
Tissue Location
Widely expressed. Expressed in the frontal lobe cortex as well as in the temporal, parietal, and occipital lobes (PubMed:27173016, PubMed:26505888).

Nprl3 (mouse) Antibody (internal region, N-Term) - 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

Nprl3 (mouse) Antibody (internal region, N-Term) - Images



AF3659a (0.3 µg/ml) staining of Human Heart lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Nprl3 (mouse) Antibody (internal region, N-Term) - References

Conservation of position and
sequence of a novel, widely expressed gene containing the major human
alpha-globin regulatory element. Vyas P, Vickers MA, Picketts DJ, Higgs DR. Genomics. 1995 Oct
10;29(3):679-89. PMID: 8575760