

NPRL3 Rabbit pAb

Catalog # AP98006

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q12980
Other Accession	Q12980
Reactivity	Human, Mouse
Predicted	Rat, Pig, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	63605
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human NPRL3
Epitope Specificity	1-100/569
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the NPR3 family.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Additional Information

Gene ID	8131
Other Names	C16orf35; CGTHBA; FFEVF3; HS-40; MARE; NPR3; RMD11; Aag; HS-26; Phg; Prox1; m(alpha)RE; RGD1308665; NPRL3_HUMAN; NPRL3; -14 gene protein; Alpha-globin regulatory element-containing gene protein; Nitrogen permease regulator 3-like protein; Protein CGTHBA; NPRL3_MOUSE; NPR3 like, GATOR1 complex subunit; chromosome 16 open reading frame 35; nitrogen permease regulator-like 3 (S. cerevisiae); NPR3-like, GATOR1 complex subunit; conserved gene telomeric to alpha globin cluster
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	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:26505888, PubMed:27173016).

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