

[38006878](http://www.uniprot.org/citations/38006878)). 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](http://www.uniprot.org/citations/23723238), PubMed:[29590090](http://www.uniprot.org/citations/29590090), PubMed:[35338845](http://www.uniprot.org/citations/35338845)). In the presence of abundant amino acids, the GATOR1 complex is ubiquitinated and inhibited by GATOR2 (PubMed:[23723238](http://www.uniprot.org/citations/23723238), PubMed:[36528027](http://www.uniprot.org/citations/36528027)). Within the GATOR1 complex, NPRL2 constitutes the catalytic subunit that mediates the GTPase activator activity and under methionine-sufficient conditions, the GTPase activator activity is inhibited by PRMT1 through methylation and consequently inducing timely mTORC1 activation (PubMed:[27173016](http://www.uniprot.org/citations/27173016), PubMed:[30651352](http://www.uniprot.org/citations/30651352), PubMed:[35338845](http://www.uniprot.org/citations/35338845)).

Cellular Location

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

Tissue Location

Most abundant in skeletal muscle, followed by brain, liver and pancreas, with lower amounts in lung, kidney, placenta and heart. Expressed in the frontal lobe cortex as well as in the temporal, parietal, and occipital lobes (PubMed:26505888, PubMed:27173016). Expressed in most lung cancer cell lines tested

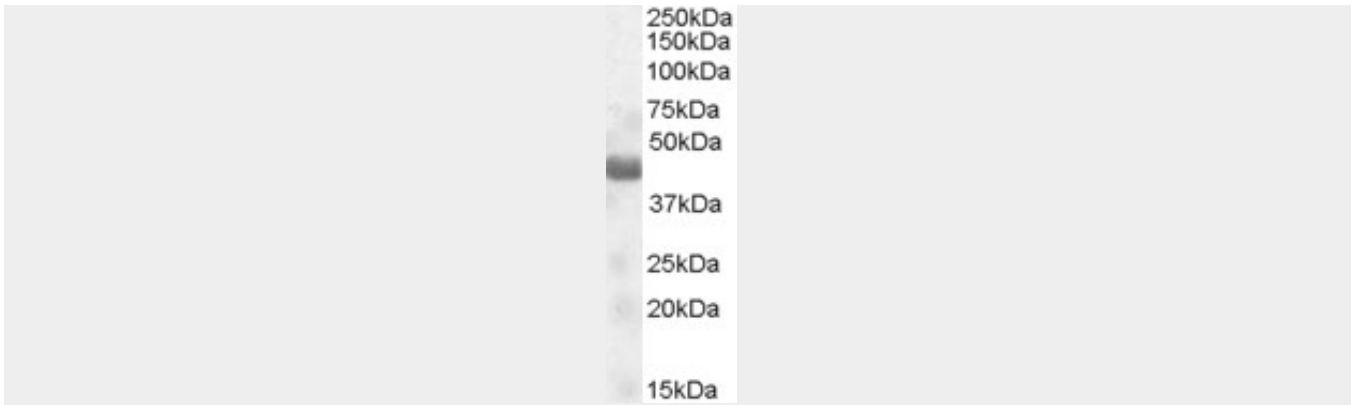
Goat Anti-TUSC4 / NPRL2 (aa 140 to 151) Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Goat Anti-TUSC4 / NPRL2 (aa 140 to 151) Antibody - Images





AF2123a (0.1 µg/ml) staining of Human Muscle lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



EB08275 (0.1µg/ml) staining of Human Muscle lysate (35µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-TUSC4 / NPRL2 (aa 140 to 151) Antibody - References

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