

## Specification

href="http://www.uniprot.org/citations/28953886" target="\_blank">28953886</a>, PubMed:<a href="http://www.uniprot.org/citations/36630958" target="\_blank">36630958</a>). The GDF15-GFRAL aversive response is triggered by stresses, such as anticancer drugs (camptothecin or cisplatin), cancers or drugs such as metformin (PubMed:<a href="http://www.uniprot.org/citations/32661391" target="\_blank">32661391</a>). Upon interaction with its ligand, GDF15, mediates the GDF15-induced autophosphorylation and activation of the RET tyrosine kinase receptor, leading to activation of MAPK- and AKT- signaling pathways (PubMed:<a href="http://www.uniprot.org/citations/31535977" target="\_blank">31535977</a>, PubMed:<a href="http://www.uniprot.org/citations/32661391" target="\_blank">32661391</a>). Ligand- binding activates GFRAL-expressing neurons localized in the area postrema and nucleus tractus solitarius of the brainstem (By similarity). The GDF15-GFRAL signal induces expression of genes involved in metabolism, such as lipid metabolism in adipose tissues (PubMed:<a href="http://www.uniprot.org/citations/32661391" target="\_blank">32661391</a>).

### Cellular Location

Cell membrane; Single-pass membrane protein; Extracellular side

### Tissue Location

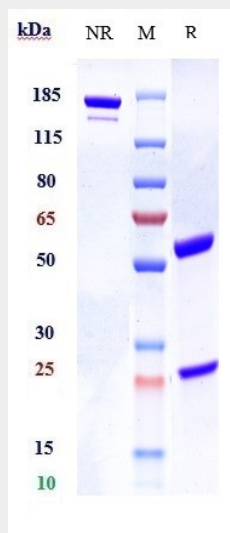
Expressed in the brainstem, restricted to cells in the area postrema and the immediately adjacent region of the nucleus tractus solitarius (at protein level) (PubMed:28846097, PubMed:28846098). Detected at low levels in testis and adipose tissue (PubMed:28846097).

## Anti-GFRAL Reference Antibody (NGM120) - Protocols

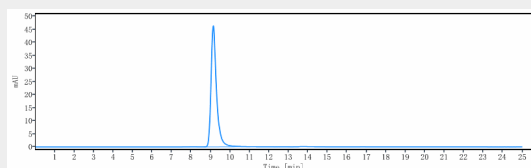
Provided below are standard protocols that you may find useful for product applications.

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

## Anti-GFRAL Reference Antibody (NGM120) - Images



Anti-GFRAL Reference Antibody (NGM120) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%



The purity of Anti-GFRAL Reference Antibody (NGM120) is more than 100% ,determined by SEC-HPLC.