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Anti-GFRAL Reference Antibody (NGM120)

Recombinant Antibody
Catalog # APR10419

Product Information

Application	Functional assay, Kinetics (SPR), Kinetics (BLI), FACS, E, FTA
Primary Accession	Q6UXV0
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	44518

Additional Information

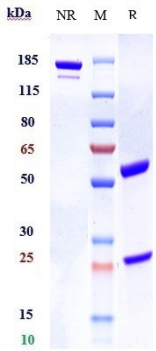
Target/Specificity	GFRAL
Endotoxin	
Conjugation	Unconjugated
Expression system	CHO
Format	Purified monoclonal antibody supplied in PBS, pH6.0, without preservative.This antibody is purified through a protein A column.

Protein Information

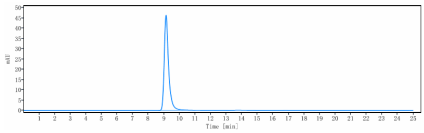
Name	GFRAL {ECO:0000303|PubMed:28846097, ECO:0000312|HGNC:HGNC:32789}
Function	Brainstem-restricted receptor for GDF15 hormone, which triggers an aversive response, characterized by nausea, vomiting, and/or loss of appetite in response to various stresses (PubMed:28846097, PubMed:28846098, PubMed:28846099, PubMed:28953886, PubMed:36630958). The aversive response is both required to reduce continuing exposure to those stresses at the time of exposure and to promote avoidance behavior in the future (PubMed:28846097, PubMed:28846098, PubMed:28846099, PubMed:28953886, PubMed:36630958). The GDF15-GFRAL aversive response is triggered by stresses, such as anticancer drugs (camptothecin or cisplatin), cancers or drugs such as metformin (PubMed:32661391). 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:31535977, PubMed:32661391). 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:32661391).

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).

Images



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



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

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