

MANF Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16437a**Specification**

MANF Antibody (N-term) - Product Information

Application	WB,E
Primary Accession	P55145
Other Accession	P0C5H9 , Q9CXI5 , P80513 , NP_006001.3
Reactivity	Human
Predicted	Bovine, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	20700
Antigen Region	23-51

MANF Antibody (N-term) - Additional Information**Gene ID** 7873**Other Names**

Mesencephalic astrocyte-derived neurotrophic factor, Arginine-rich protein, Protein ARMET, MANF, ARMET, ARP

Target/Specificity

This MANF antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 23-51 amino acids from the N-terminal region of human MANF.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

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

Precautions

MANF Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

MANF Antibody (N-term) - Protein Information**Name** MANF ([HGNC:15461](#))

Synonyms ARMET, ARP

Function Selectively promotes the survival of dopaminergic neurons of the ventral mid-brain (PubMed:[12794311](#)). Modulates GABAergic transmission to the dopaminergic neurons of the substantia nigra (By similarity). Enhances spontaneous, as well as evoked, GABAergic inhibitory postsynaptic currents in dopaminergic neurons (By similarity). Inhibits cell proliferation and endoplasmic reticulum (ER) stress-induced cell death (PubMed:[18561914](#), PubMed:[22637475](#), PubMed:[29497057](#), PubMed:[36739529](#)). Retained in the ER/sarcoplasmic reticulum (SR) through association with the endoplasmic reticulum chaperone protein HSPA5 under normal conditions (PubMed:[22637475](#)). Stabilizes HSPA5/BiP in its substrate-bound ADP state, which facilitates HSPA5/BiP incorporation into chaperone-client complexes during endoplasmic reticulum stress, its interaction with HSPA5/BiP inhibits ATP binding to HSPA5/BiP and subsequent nucleotide exchange (By similarity). As a result acts as a repressor of the unfolded protein response (UPR) pathway (By similarity). Up-regulated and secreted by the ER/SR in response to ER stress and hypoxia (PubMed:[22637475](#)). Following secretion by the ER/SR, directly binds to 3-O-sulfogalactosylceramide, a lipid sulfatide in the outer cell membrane of target cells (PubMed:[29497057](#)). Sulfatide binding promotes its cellular uptake by endocytosis, and is required for its role in alleviating ER stress and cell toxicity under hypoxic and ER stress conditions (PubMed:[29497057](#)). Essential for embryonic lung development (By similarity). Required for the correct postnatal temporal and structural development of splenic white pulp (By similarity). Required for the repair-associated myeloid response in skeletal muscle, acts as a regulator of phenotypic transition towards prorepair macrophages in response to muscle injury and as a result limits excessive proinflammatory signaling (By similarity). Represses RELA expression and therefore NF-κB signaling in the myocardium, as a result limits macrophage infiltration of injured tissue and M1 macrophage differentiation in response to myocardial injury (By similarity). Required for endochondral ossification in long bones and the skull during postnatal development (By similarity).

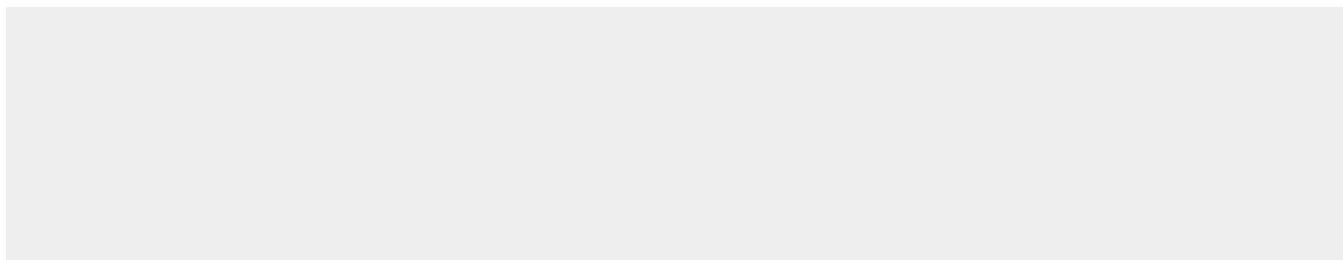
Cellular Location

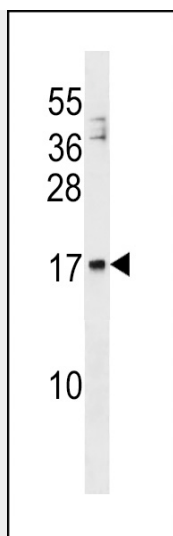
Secreted. Endoplasmic reticulum lumen. Sarcoplasmic reticulum lumen. Note=Retained in the endoplasmic reticulum (ER), and sarcoplasmic reticulum (SR) under normal conditions (PubMed:[22637475](#)). Up-regulated and secreted by the ER/SR in response to ER stress and hypoxia (PubMed:[22637475](#), PubMed:[29497057](#))

MANF Antibody (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 Cytometry](#)
- [Cell Culture](#)

MANF Antibody (N-term) - Images



MANF Antibody (N-term) (Cat. #AP16437a) western blot analysis in 293 cell line lysates (35ug/lane). This demonstrates the MANF antibody detected the MANF protein (arrow).

MANF Antibody (N-term) - Background

Selectively promotes the survival of dopaminergic neurons of the ventral mid-brain. Modulates GABAergic transmission to the dopaminergic neurons of the substantia nigra. Enhances spontaneous, as well as evoked, GABAergic inhibitory postsynaptic currents in dopaminergic neurons (By similarity). Inhibits cell proliferation and endoplasmic reticulum (ER) stress-induced cell death.