

**ARP Polyclonal Antibody**  
Catalog # AP73492**Specification****ARP Polyclonal Antibody - Product Information**

Application	<b>WB</b>
Primary Accession	<a href="#">P55145</a>
Reactivity	<b>Human, Mouse, Rat</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>

**ARP Polyclonal Antibody - Additional Information****Gene ID** 7873**Other Names**

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

**Dilution**

WB~~Western Blot: 1/500 - 1/2000. IHC-p: 1/100-1/300. ELISA: 1/20000. Not yet tested in other applications.

**Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions**

-20°C

**ARP Polyclonal Antibody - Protein Information****Name** MANF ([HGNC:15461](#))**Synonyms** ARMET, ARP**Function**

Selectively promotes the survival of dopaminergic neurons of the ventral mid-brain (PubMed:<a href="http://www.uniprot.org/citations/12794311" target="\_blank">12794311</a>). 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:<a href="http://www.uniprot.org/citations/18561914" target="\_blank">18561914</a>, PubMed:<a href="http://www.uniprot.org/citations/22637475" target="\_blank">22637475</a>, PubMed:<a href="http://www.uniprot.org/citations/29497057" target="\_blank">29497057</a>). Retained in the ER/sarcoplasmic reticulum (SR) through association with the endoplasmic reticulum chaperone protein HSPA5 under normal conditions (PubMed:<a href="http://www.uniprot.org/citations/22637475" target="\_blank">22637475</a>). Up-regulated and secreted by the ER/SR in response to ER stress and hypoxia (PubMed:<a href="http://www.uniprot.org/citations/12794311" target="\_blank">12794311</a>).

<http://www.uniprot.org/citations/22637475> target="\_blank">22637475</a>). Following secretion by the ER/SR, directly binds to 3-O-sulfogalactosylceramide, a lipid sulfatide in the outer cell membrane of target cells (PubMed:<a href="http://www.uniprot.org/citations/29497057" target="\_blank">29497057</a>). 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:<a href="http://www.uniprot.org/citations/29497057" target="\_blank">29497057</a>).

#### Cellular Location

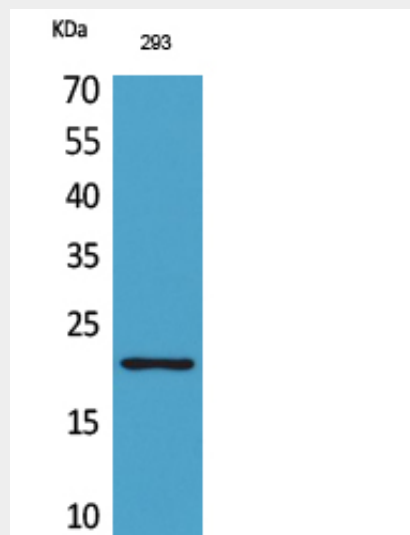
Secreted. Endoplasmic reticulum lumen. Sarcoplasmic reticulum lumen. Note=Retained in the endoplasmic reticulum (ER), and sarcoplasmic reticulum (SR) under normal conditions (PubMed:22637475). Up-regulated and secreted by the ER/SR in response to ER stress and hypoxia (PubMed:22637475, PubMed:29497057)

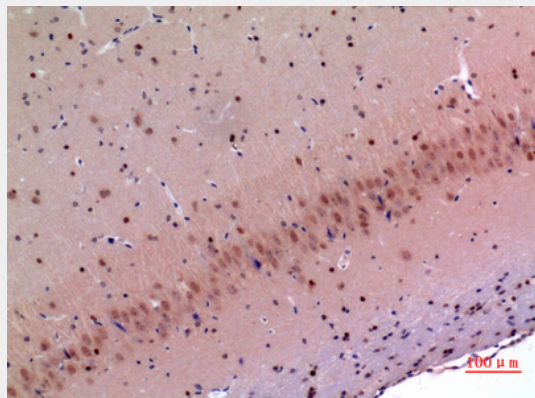
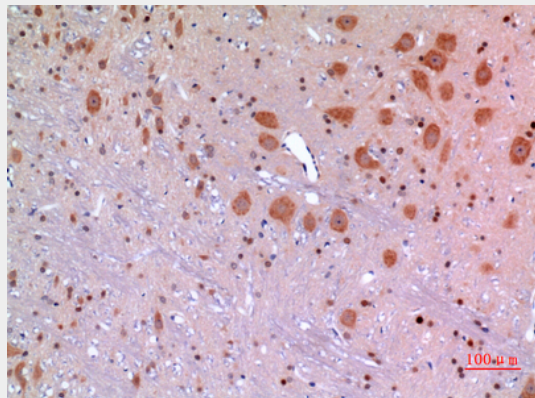
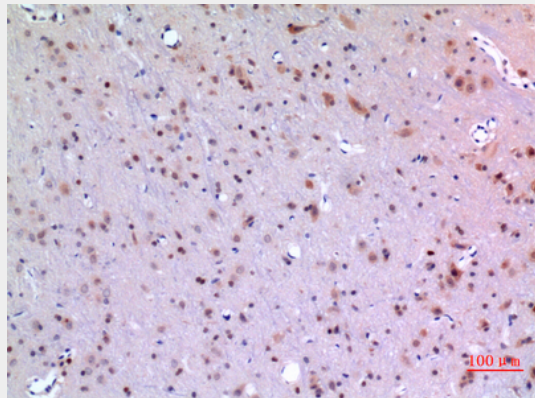
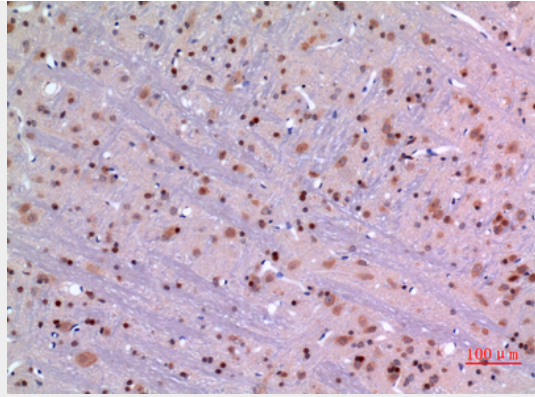
#### ARP Polyclonal Antibody - Protocols

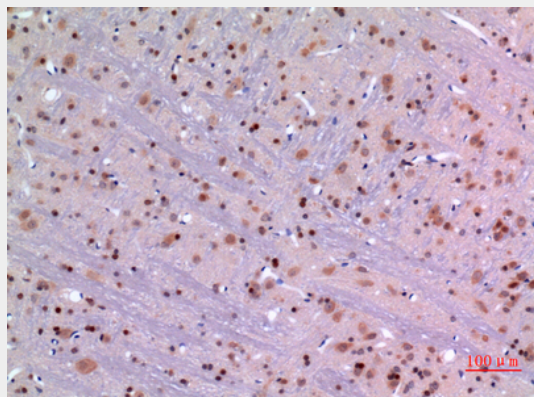
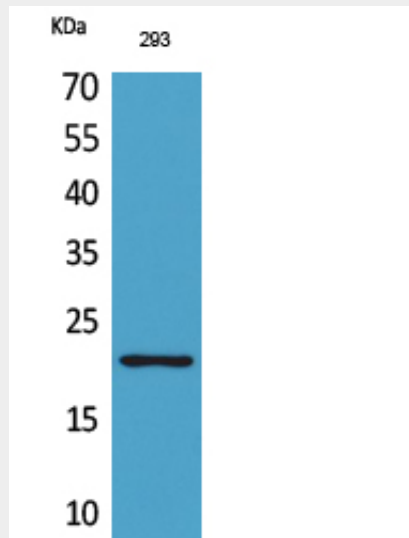
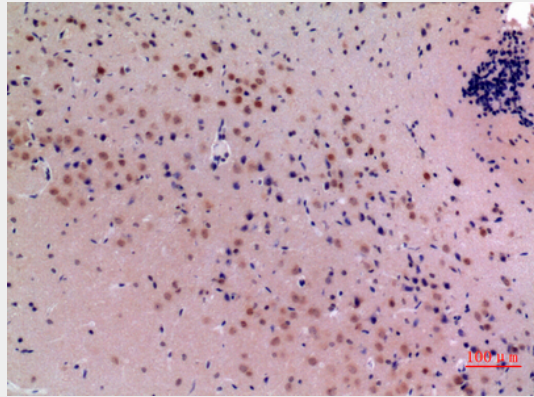
Provided below are standard protocols that you may find useful for product applications.

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

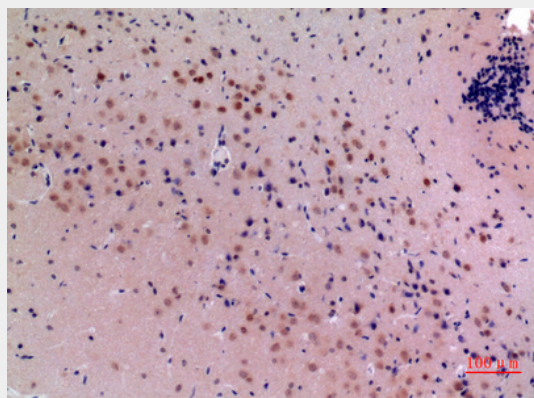
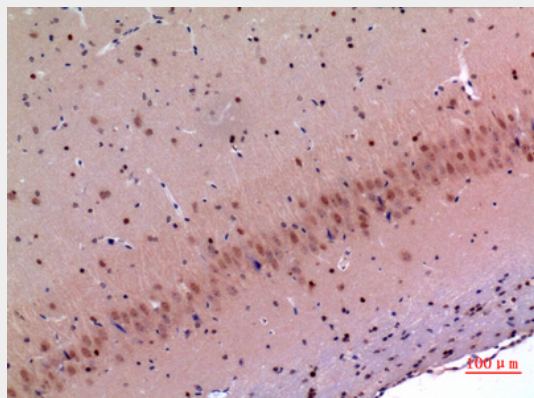
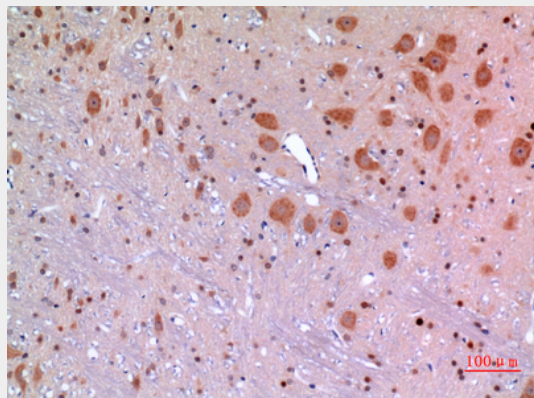
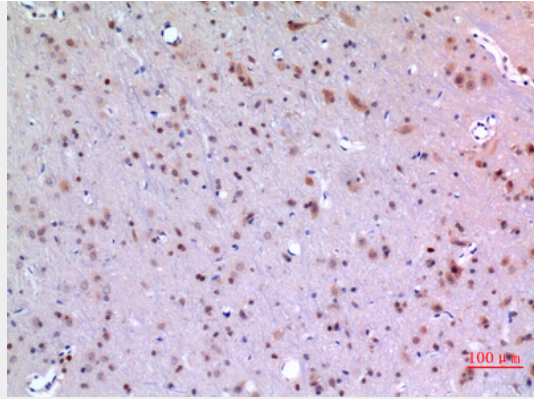
#### ARP Polyclonal Antibody - Images











## **ARP Polyclonal Antibody - Background**

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). Retained in the ER/sarcoplasmic reticulum (SR) through association with the endoplasmic reticulum chaperone protein HSPA5 under normal conditions (PubMed:22637475). 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).