

NENF Antibody

Catalog # ASC10746

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q9UMX5
Other Accession	NP_037481 , 7019545
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	18856
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	NENF antibody can be used for detection of NENF by Western blot at 1 - 2 μ g/mL. Despite its predicted molecular weight of ~20kDa, NENF is observed at 37 kDa in SDS-PAGE. Antibody can also be used for immunohistochemistry starting at 10 μ g/mL. For immunofluorescence start at 20 μ g/mL.

Additional Information

Gene ID	29937
Other Names	Neudesin, Cell immortalization-related protein 2, Neuron-derived neurotrophic factor, Secreted protein of unknown function, SPUF protein, NENF, CIR2, SPUF
Target/Specificity	NENF;
Reconstitution & Storage	NENF antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	NENF Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	NENF (HGNC:30384)
Synonyms	CIR2, SPUF
Function	Acts as a neurotrophic factor in postnatal mature neurons enhancing neuronal survival (PubMed: 31536960). Promotes cell proliferation and neurogenesis in undifferentiated neural progenitor cells at the embryonic stage and inhibits differentiation of astrocytes (By similarity). Its neurotrophic activity is exerted via MAPK1/ERK2, MAPK3/ERK1 and AKT1/AKT pathways (By

similarity). Neurotrophic activity is enhanced by binding to heme (By similarity). Also acts as an anorexigenic neurotrophic factor that contributes to energy balance (By similarity).

Cellular Location

Secreted, extracellular space. Mitochondrion. Endoplasmic reticulum.
Note=Localized to mitochondria and endoplasmic reticulum by PINK1 and PARK7

Tissue Location

Ubiquitously expressed with high expression in heart. Over-expressed in various tumors including carcinomas of the uterine cervix, lymphoma, colon, lung, skin and leukemia, as well as carcinoma of the breast.

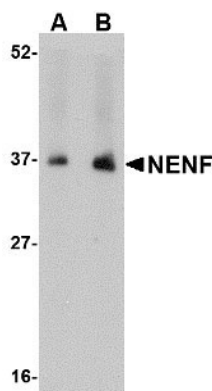
Background

NENF Antibody: NENF is a secreted protein that is expressed in neurons but not glial cells of the brain. This protein has neurotrophic activity in primary cultured mouse neurons but not mitogenic activity in primary cultured mouse astrocytes. NENF activated mitogen-activated protein (MAP) and phosphatidylinositol-3 kinase pathways and could be inhibited by pertussis toxin but not receptor tyrosine kinases, suggesting that NENF acts through a Gi/Go-protein-coupled receptor.

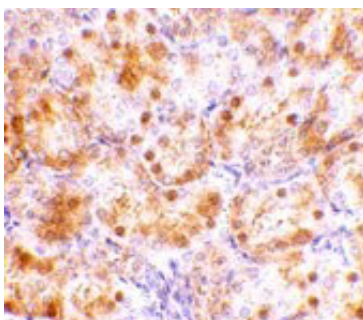
References

Kimura I, Yoshioka M, Konishi M, et al. Neudesin, a novel secreted protein with a unique primary structure and neurotrophic activity. J. Neurosci. Res.2005; 79:287-94.

Images

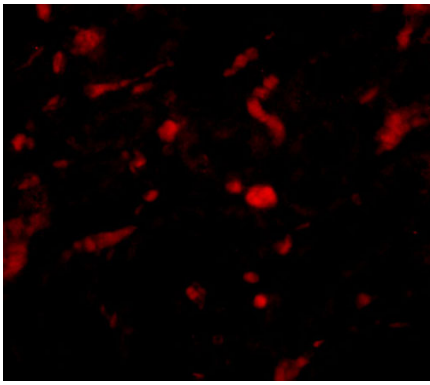


Western blot analysis of NENF in human kidney tissue lysate with NENF antibody at (A) 1 and (B) 2 µg/mL.



Immunohistochemistry of NENF in rat kidney tissue with NENF antibody at 10 µg/mL.

Immunofluorescence of NENF in rat kidney tissue with NENF antibody at 20 µg/mL.



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