

NENF Antibody

Catalog # ASC10746

Specification

NENF Antibody - Product Information

Application
Primary Accession
Other Accession
Reactivity
Host
Clonality
Isotype
Application Notes

WB, IHC, IF

O9UMX5

NP_037481, 7019545

Human, Mouse, Rat
Rabbit
Polyclonal

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.

NENF Antibody - Additional Information

Gene ID
Target/Specificity

NENF:

29937

laG

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.

NENF Antibody - 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). Acts also 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

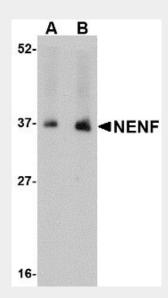
Ubiquitously expressed with high expression in heart. Over-expressed in various tumors including carcinomas of the uterine cervix, lymphoma, colon, lung, skin and leukemia, as well as carcinoma of the breast.

NENF Antibody - Protocols

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

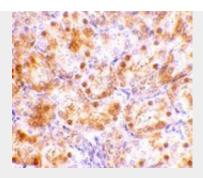
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

NENF Antibody - Images

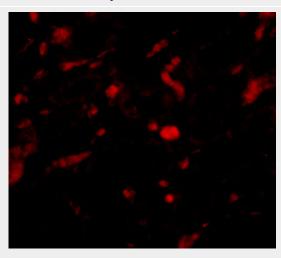


Western blot analysis of NENF in human kidney tissue lysate with NENF antibody at (A) 1 and (B) $2 \mu g/mL$.





Immunohistochemistry of NENF in rat kidney tissue with NENF antibody at 10 $\mu g/mL$.



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

NENF Antibody - 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 phosphotidylinositol-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.

NENF Antibody - 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.