Product Datasheet

NME1 Antibody

Catalog No: #32049

Package Size: #32049-1 50ul #32049-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

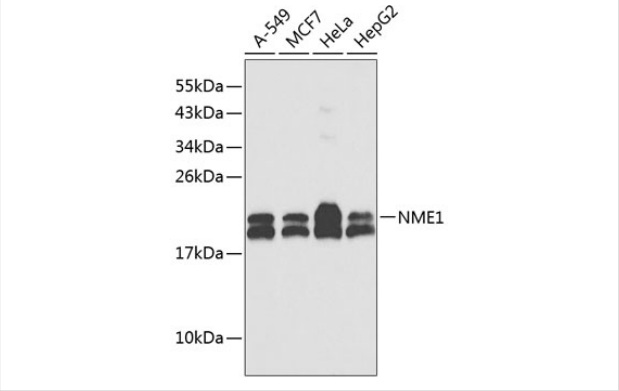
Description

Product Name	NME1 Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were purified by affinity purification using immunogen.
Applications	WB,IHC,IF
Species Reactivity	Human,Mouse,Rat
Specificity	The antibody detects endogenous level of total NME1 protein.
Immunogen Type	Peptide
Immunogen Description	A synthetic peptide of human NME1.
Target Name	NME1
Other Names	NME1; AWD; GAAD; NB; NBS
Accession No.	Swiss-Prot:P15531NCBI Gene ID:4830
Uniprot	P15531
GeneID	4830;
SDS-PAGE MW	17KD
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

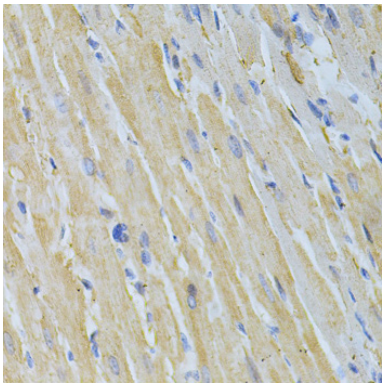
Application Details

WB□1:500 - 1:2000IHC□1:50 - 1:200IF□1:50 - 1:200

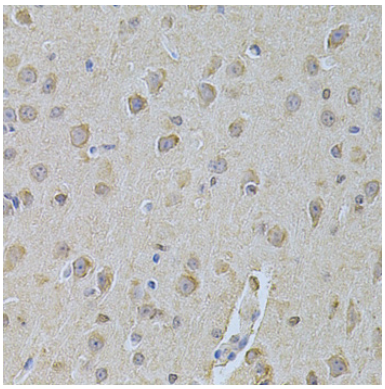
Images



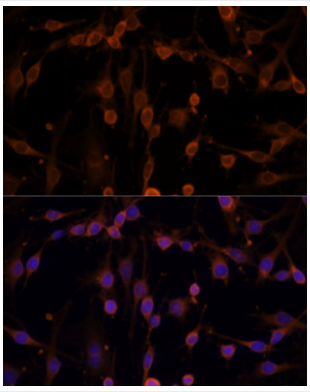
Western blot analysis of extracts of various cell lines, using NME1 .



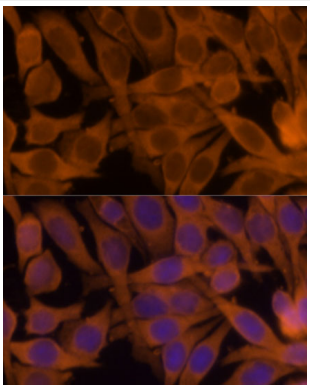
Immunohistochemistry of paraffin-embedded rat heart using NME1 at dilution of 1:200 (40x lens).



Immunohistochemistry of paraffin-embedded mouse brain using NME1 at dilution of 1:200 (40x lens).



Immunofluorescence analysis of C6 cells using NME1 at dilution of 1:100. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of HeLa cells using NME1 at dilution of 1:100. Blue: DAPI for nuclear staining.

Background

The NDK/NME/NM23 kinase family (encoded by the NME gene family) consists of at least eight distinct proteins that exhibit different cellular localization (1). Members of this group inhibit metastasis in a variety of tumor cell types (2). All NDK/NME/NM23 proteins possess nucleoside diphosphatase kinase (NDK) activity and catalyze the phosphorylation of nucleoside diphosphate to the corresponding nucleoside triphosphate to regulate a diverse array of cellular events (3). At least four classes of NDK biochemical activities have been described, including protein-protein interactions (4-6), regulation of GTP-binding protein function (7-9), DNA-associated activities (10,11), and histidine-dependent protein phosphotransferase activity (12). NDK/NME proteins participate in the regulation of a broad spectrum of cellular responses, including development, differentiation, proliferation, endocytosis, and apoptosis (13). Because of its role in metastasis suppression and oncogenesis, NDKA (NME1/NM23-H1)

has been widely studied (14). NDKA (NM23-H1) and NDKB (NM23-H2) are encoded by adjacent NME1 and NME2 genes and share 90% sequence identity. Two serine residues (Ser122 and Ser144) on NDKA/NM23-H1 can be phosphorylated by AMPKα1, but only phosphorylation at Ser122 determines whether NDKA channels ATP to AMPKα1. This regulates AMPKα1 activity towards ACC1, an important regulator of fatty acid metabolism (15). Mutation of NDKB/NM23-H2 at Ser122 (S122P) in melanoma cells results in altered phosphoryl transfer activity (16).

Note: This product is for in vitro research use only