

Product datasheet

info@arigobio.com

ARG40449 anti-NME4 / nm23 H4 antibody

Package: 100 μl Store at: -20°C

Summary

Product Description Rabbit Polyclonal antibody recognizes NME4 / nm23 H4

Tested Reactivity Hu, Ms, Rat

Tested Application WB

Host Rabbit

Clonality Polyclonal

Isotype IgG

Target Name NME4 / nm23 H4

Species Human

Immunogen Recombinant fusion protein corresponding to aa. 1-187 of Human NME4 (NP_005000.1).

Conjugation Un-conjugated

Alternate Names Nucleoside diphosphate kinase, mitochondrial; NDPK-D; Nucleoside diphosphate kinase D; NDP kinase,

mitochondrial; nm23-H4; NDK; NDPKD; EC 2.7.4.6; NM23H4

Application Instructions

Application table	Application	Dilution
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	Mouse stomach	
Observed Size	21 kDa	

Properties

Form Liquid

Purification Affinity purified.

Buffer PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.

Preservative 0.02% Sodium azide

Stabilizer 50% Glycerol

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol NME4

Gene Full Name NME/NM23 nucleoside diphosphate kinase 4

Background The nucleoside diphosphate (NDP) kinases (EC 2.7.4.6) are ubiquitous enzymes that catalyze transfer of

gamma-phosphates, via a phosphohistidine intermediate, between nucleoside and dioxynucleoside triand diphosphates. The enzymes are products of the nm23 gene family, which includes NME4 (Milon et

al., 1997 [PubMed 9099850]).[supplied by OMIM, May 2008]

Function Major role in the synthesis of nucleoside triphosphates other than ATP. The ATP gamma phosphate is

 $transferred\ to\ the\ NDP\ beta\ phosphate\ via\ a\ ping-pong\ mechanism,\ using\ a\ phosphorylated\ active-site$

intermediate. Through the catalyzed exchange of gamma-phosphate between di- and

triphosphonucleosides participates in regulation of intracellular nucleotide homeostasis. Binds to anionic phospholipids, predominantly to cardiolipin; the binding inhibits its phosphotransfer activity. Acts as mitochondria-specific NDK; its association with cardiolipin-containing mitochondrial inner membrane is coupled to respiration suggesting that ADP locally regenerated in the mitochondrion innermembrane space by its activity is directly taken up via ANT ADP/ATP translocase into the matrix space to stimulate respiratory ATP regeneration. Proposed to increase GTP-loading on dynamin-related GTPase OPA1 in mitochondria. In vitro can induce liposome cross-linking suggesting that it can cross-link inner and outer membranes to form contact sites, and promotes intermembrane migration of anionic phosphoplipids. Promotes the redistribution of cardiolipin between the mitochondrial inner membrane and outer membrane which is implicated in pro-apoptotic signaling. [UniProt]

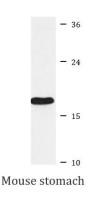
Calculated Mw 21 kDa

Cellular Localization Mitochondrion intermembrane space; Peripheral membrane protein. Mitochondrion matrix.

Note=Predominantly localized in the mitochondrion intermembrane space (PubMed:18635542).

Colocalizes with OPA1 in mitochondria (PubMed:24970086). [UniProt]

Images



ARG40449 anti-NME4 / nm23 H4 antibody WB image

Western blot: 25 μg of Mouse stomach lysate stained with ARG40449 anti-NME4 / nm23 H4 antibody at 1:1000 dilution.