

Rtn-3 Monoclonal Antibody

Catalog No :	YM0568
Reactivity :	Human
Applications :	IF;ELISA
Target :	Rtn-3
Fields :	>>Alzheimer disease
Gene Name :	RTN3
Protein Name :	Reticulon-3
Human Gene Id :	10313
Human Swiss Prot No :	O95197
Mouse Swiss Prot No :	Q9ES97
Immunogen :	Purified recombinant fragment of Rtn-3 expressed in E. Coli.
Specificity :	Rtn-3 Monoclonal Antibody detects endogenous levels of Rtn-3 protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Monoclonal, Mouse
Dilution :	IF 1:200 - 1:1000. ELISA: 1:10000. Not yet tested in other applications.
Purification :	Affinity purification
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Cell Pathway :	Regulation of Microtubule Dynamics; Regulation of Actin Dynamics; SAPK_JNK; Stem cell pathway; Adherens_Junction

P References :

1. Biochem Biophys Res Commun. 2005 Sep 9;334(4):1198-205.
 2. Brain Res Mol Brain Res. 2005 Aug 18;138(2):236-43.
 3. FASEB J. 2003 Jul;17(10):1238-47.
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Background :

This gene belongs to the reticulon family of highly conserved genes that are preferentially expressed in neuroendocrine tissues. This family of proteins interact with, and modulate the activity of beta-amyloid converting enzyme 1 (BACE1), and the production of amyloid-beta. An increase in the expression of any reticulon protein substantially reduces the production of amyloid-beta, suggesting that reticulon proteins are negative modulators of BACE1 in cells. Alternatively spliced transcript variants encoding different isoforms have been found for this gene, and pseudogenes of this gene are located on chromosomes 4 and 12. [provided by RefSeq, May 2012],

Function :

function:May be involved in membrane trafficking in the early secretory pathway. Inhibits BACE1 activity and amyloid precursor protein processing. May induce caspase-8 cascade and apoptosis. May favor BCL2 translocation to the mitochondria upon endoplasmic reticulum stress. In case of enteroviruses infection, RTN3 may be involved in the viral replication or pathogenesis.,induction:By endoplasmic reticulum stress (at protein level).,miscellaneous:The sequence shown here is derived from an EMBL/GenBank/DDBJ third party annotation (TPA) entry.,similarity:Contains 1 reticulon domain.,subunit:Homodimer. Interacts with RTN4. Isoform 3 interacts with BACE1, BACE2, BCL2 and FADD. Interacts with Coxsackievirus A16, enterovirus 71 and poliovirus P2C proteins.,tissue specificity:Isoform 3 is widely expressed, with highest levels in brain, where it is enriched in neuronal cell bodies from gray matter

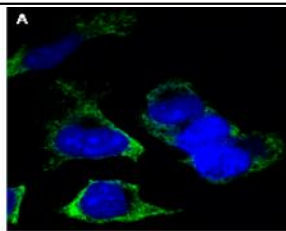
Subcellular Location :

Endoplasmic reticulum membrane ; Multi-pass membrane protein . Golgi apparatus membrane ; Multi-pass membrane protein .

Expression :

Isoform 3 is widely expressed, with highest levels in brain, where it is enriched in neuronal cell bodies from gray matter (at protein level). Three times more abundant in macula than in peripheral retina. Isoform 1 is expressed at high levels in brain and at low levels in skeletal muscle. Isoform 2 is only found in melanoma.

Products Images



Confocal immunofluorescence analysis of HeLa (A), A431 (B) and THP-1 (C) cells using Rtn-3 Monoclonal Antibody (green). Blue: DRAQ5 fluorescent DNA dye.

