

TOR1A Antibody (C-term) Blocking Peptide

Synthetic peptide Catalog # BP18209b

Specification

TOR1A Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

014656

TOR1A Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 1861

Other Names

Torsin-1A, Dystonia 1 protein, Torsin ATPase-1A, 364-, Torsin family 1 member A, TOR1A, DQ2, DYT1, TA, TORA

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

TOR1A Antibody (C-term) Blocking Peptide - Protein Information

Name TOR1A

Synonyms DQ2, DYT1, TA, TORA

Function

Protein with chaperone functions important for the control of protein folding, processing, stability and localization as well as for the reduction of misfolded protein aggregates. Involved in the regulation of synaptic vesicle recycling, controls STON2 protein stability in collaboration with the COP9 signalosome complex (CSN). In the nucleus, may link the cytoskeleton with the nuclear envelope, this mechanism seems to be crucial for the control of nuclear polarity, cell movement and, specifically in neurons, nuclear envelope integrity. Participates in the cellular trafficking and may regulate the subcellular location of multipass membrane proteins such as the dopamine transporter SLC6A3, leading to the modulation of dopamine neurotransmission. In the endoplasmic reticulum, plays a role in the quality control of protein folding by increasing clearance of misfolded proteins such as SGCE variants or holding them in an intermediate state for proper refolding. May have a redundant function with TOR1B in non- neural tissues.

Cellular Location

Endoplasmic reticulum lumen. Nucleus membrane; Peripheral membrane protein. Cell projection, growth cone. Cytoplasmic vesicle membrane. Cytoplasmic vesicle, secretory vesicle. Cytoplasmic



vesicle, secretory vesicle, synaptic vesicle. Cytoplasm, cytoskeleton. Note=Upon oxidative stress, redistributes to protusions from the cell surface (By similarity). Peripherally associated with the inner face of the ER membrane, probably mediated by the interaction with TOR1AIP1. The association with nucleus membrane is mediated by the interaction with TOR1AIP2.

Tissue Location

Widely expressed. Highest levels in kidney and liver. In the brain, high levels found in the dopaminergic neurons of the substantia nigra pars compacta, as well as in the neocortex, hippocampus and cerebellum. Also highly expressed in the spinal cord

TOR1A Antibody (C-term) Blocking Peptide - Protocols

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

• Blocking Peptides

TOR1A Antibody (C-term) Blocking Peptide - Images

TOR1A Antibody (C-term) Blocking Peptide - Background

The protein encoded by this gene is a member of the AAAfamily of adenosine triphosphatases (ATPases), is related to theClp protease/heat shock family and is expressed prominently in thesubstantia nigra pars compacta. Mutations in this gene result in the autosomal dominant disorder, torsion dystonia 1. [provided byRefSeq].

TOR1A Antibody (C-term) Blocking Peptide - References

Sharma, N., et al. Mov. Disord. 25(13):2183-2187(2010)Kaiser, F.J., et al. Ann. Neurol. 68(4):554-559(2010)Gavarini, S., et al. Ann. Neurol. 68(4):549-553(2010)Granata, A., et al. Eur. J. Neurol. 17 SUPPL 1, 81-87 (2010) :Warner, T.T., et al. Biochem. Soc. Trans. 38(2):452-456(2010)