

TorsinA (V-20): sc-19482

BACKGROUND

A mutation of the DYT1 gene, which codes for TorsinA, has been identified as the cause of one form of autosomal dominantly inherited dystonia. Early-onset torsion dystonia is a movement disorder, characterized by twisting muscle contractures, that begins in childhood. Symptoms are believed to result from altered neuronal communication in the basal ganglia. TorsinA comprises 332 amino acids. TorsinA is widely expressed throughout the mouse central nervous system and is detected in the majority of neurons in nearly all regions. The proteins display cytoplasmic distribution, although in some types of neurons localization is perinuclear. TorsinA often performs chaperone-like functions that assist in the assembly, operation, or disassembly of protein complexes. The gene which encodes TorsinA has high homology to three additional mammalian genes and a nematode gene and distal similarity to the family of heat-shock proteins and the Clp protease family. The gene which encodes TorsinA maps to human chromosome 9q34.11.

REFERENCES

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- Walker, R.H., Brin, M.F., Sandu, D., Good, P.F. and Shashidharan, P. 2002. TorsinA immunoreactivity in brains of patients with DYT1 and non-DYT1 dystonia. *Neurology* 58: 120-124.
- LocusLink Report (LocusID: 605204). <http://www.ncbi.nlm.nih.gov/LocusLink/>

CHROMOSOMAL LOCATION

Genetic locus: TOR1A (human) mapping to 9q34.11; Tor1a (mouse) mapping to 2 B.

SOURCE

TorsinA (V-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping of TorsinA of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-19482 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

TorsinA (V-20) is recommended for detection of TorsinA of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

TorsinA (V-20) is also recommended for detection of TorsinA in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for TorsinA siRNA (h): sc-42303, TorsinA siRNA (m): sc-154559, TorsinA shRNA Plasmid (h): sc-42303-SH, TorsinA shRNA Plasmid (m): sc-154559-SH, TorsinA shRNA (h) Lentiviral Particles: sc-42303-V and TorsinA shRNA (m) Lentiviral Particles: sc-154559-V.

Molecular Weight of glycosylated TorsinA: 38 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **TorsinA (D-7): sc-373915**, our highly recommended monoclonal alternative to TorsinA (V-20).