



Torsin3A (Y-12): sc-131813

BACKGROUND

Torsin3A (TOR3A), also known as ATP-dependent interferon-responsive protein (ADIR), is a 397 amino acid member of the clpA/clpB family of proteins. Localized to the cytoplasm and the endoplasmic reticulum, Torsin3A is most highly expressed in stomach, lymph nodes and salivary glands. Torsin3A contains a hydrophobic N-terminal sequence, an ATP binding domain and eight putative phosphorylation sites. Highly homologous with TorsinA and TorsinB, Torsin3A is thought to be related to the AAA chaperone-like family of ATPases. Members of this family play a role in the assembly, disassembly and operation of a variety of protein complexes, confer increased tolerance to high temperature and promote specific proteolysis. Torsin3A is also referred to as an interferon responsive gene, as interaction with type 1 interferons (IFN- α and IFN- β) cause a 5- to 40-fold increase in Torsin3A mRNA levels. Three isoforms of Torsin3A exist as a result of alternative splicing events, and isoform 2 is expressed exclusively in the placenta.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Tor3a (mouse) mapping to 1 H1.

SOURCE

Torsin3A (Y-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Torsin3A of mouse origin.

RESEARCH USE

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

PRODUCT

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

Blocking peptide available for competition studies, sc-131813 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Torsin3A (Y-12) is recommended for detection of Torsin3A of mouse 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).

Suitable for use as control antibody for Torsin3A siRNA (m): sc-154558, Torsin3A shRNA Plasmid (m): sc-154558-SH and Torsin3A shRNA (m) Lentiviral Particles: sc-154558-V.

Molecular Weight of Torsin3A: 46 kDa.

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.

STORAGE

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

PROTOCOLS

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