**BACKGROUND**

Dynamin III (DNM3, Dyna III, T Dynamin) is a microtubule-associated, force-producing GTPase that can form helical structures around the neck of vesicles. GTP hydrolysis-dependent extension of the helical structure releases the vesicle. Dynamin III contains a pair of phosphorylation sites at Ser 759 and Ser 763. Both 3.0 and 7.2 kb Dynamin III transcripts are detectable in brain. The 3.0 kb Dynamin III transcript is also detectable in testis. The 7.2 kb Dynamin III transcript is brain-specific for a protein thought to influence synaptogenesis in the CNS through recycling, neurotransmitter reuptake and growth factor-receptor signaling, in a thyroid hormone-dependent manner. A 6 kb antisense transcript (Dnm3os) contained within an intron of the mouse Dnm3 gene may be undertransregulation by twist during mouse development. Dynamin III and Dnm3os transcripts overlap during embryogenesis and in adult tissues, except that Dynamin III is abundant in adult brain and testis whereas Dnm3os is abundant in embryos and gravid uterus.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: DNM3 (human) mapping to 1q24.3; Dnm3 (mouse) mapping to 1H2.1.

**SOURCE**

Dynamin III (Q-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of Dynamin III of human origin.

**STORAGE**

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

**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-69473 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

**APPLICATIONS**

Dynamin III (Q-15) is recommended for detection of Dynamin III 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).


Molecular Weight of Dynamin III: 98 kDa.

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**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.