

Product datasheet for TA336784

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OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

STMN2 Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

ICC/IF, IHC, WB **Applications:**

Recommended Dilution: Knockdown Validated, Immunocytochemistry/ Immunofluorescence: 1 - 2 ug/ml,

> Immunohistochemistry: 1:200 - 1:500, Immunohistochemistry-Frozen: 1:200 - 1:500, Western Blot: 1 - 2 ug/ml, Immunohistochemistry Whole-Mount, In vivo assay, Immunohistochemistry-

Paraffin, In vitro assay

Reactivity: Human, Mouse, Rat, Bovine

Host: Rabbit

Clonality: Polyclonal

Immunogen: C-terminal peptide of mouse STMN2. [Swiss-Prot P55821]

Formulation: Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

Concentration: lot specific

Purification: Whole antisera Conjugation: Unconjugated

Store at -20°C as received. Storage:

Stability: Stable for 12 months from date of receipt.

Predicted Protein Size: 22 kDa

Gene Name: stathmin 2 Database Link: NP 008960

Entrez Gene 20257 MouseEntrez Gene 84510 RatEntrez Gene 11075 Human

Q93045



Background:

STMN2 (Stathmin-2 or SCG10/Scgn10) belongs to stathmin family of proteins which are known to bind tubulin for acting as a sequestering agents and for promoting microtubule disassembly. STMN2 is a membrane-associated neuronal protein expressed mainly during development and its expression correlates with neurite outgrowth. STMN2 possesses a unique N-terminal domain that is critical for membrane binding, is responsible for STMN2 localization to the Golgi complex and is important in its targeting to growth cones. STMN2 localize to perinuclear cytoplasm, axons, and growth cones of developing neurons, and exists in soluble as well as membrane-bound forms. STMN2 interacts with ITMC2, as well as MAPK8, and when phosphorylated by MAPK8, it act as regulator of microtubule stability which controls neurite length in cortical neurons. Unlike other stathmins, STMN2 acts in two ways to promote microtubule dynamics: it stabilizes microtubules at their plus end and promotes microtubule catastrophe at their minus end. In the developing brain, STMN2 negatively regulates the rate of exit from multipolar stage and retards radial migration from the ventricular zone. Reduced STMN2 expression is associated with Down's syndrome and Alzheimer's disease.

Synonyms:

SCG10; SCGN10

Note:

This STMN2 antibody is useful for Immunocytochemistry/Immunofluorescence, Immunohistochemistry on frozen sections and Western blot, where a band can be seen at ~22 kDa. Use for in vivo assays reported in the scientific literature (PMID: 22726832).