

M6A (T-14): sc-168523

BACKGROUND

Neuronal membrane glycoprotein M6-a (GPM6A), also known as M6A, is a 278 amino acid protein belonging to the myelin proteolipid protein family. Expressed exclusively in the brain, M6A is localized to the plasma membrane and contains four transmembrane domains. The gene encoding M6A has been identified as a stress-responsive gene. The protein is down-regulated in the hippocampus of socially and physically stressed animals, and the effects are reversed with the administration of anti-depressants. M6A is thought to play a role in filopodium/spine outgrowth, synapse formation, neuronal migration, and mood disorders, such as depression. The gene encoding human M6A maps to chromosome 4q34.2. Two splice variants of M6A exist as a result of alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: GPM6A (human) mapping to 4q34.2; Gpm6a (mouse) mapping to 8 B1.3.

SOURCE

M6A (T-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of M6A 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-168523 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

M6A (T-14) is recommended for detection of M6A 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); non cross-reactive with M6B.

M6A (T-14) is also recommended for detection of M6A in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for M6A siRNA (h): sc-89093, M6A siRNA (m): sc-149202, M6A shRNA Plasmid (h): sc-89093-SH, M6A shRNA Plasmid (m): sc-149202-SH, M6A shRNA (h) Lentiviral Particles: sc-89093-V and M6A shRNA (m) Lentiviral Particles: sc-149202-V.

Molecular Weight of M6A: 31 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.

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.