Species Reactivity: Human/Mouse

Specificity: Detects human Stathmin-2/STMN2 in direct ELISAs and Western blots. In Western blots, no cross-reactivity with recombinant human Stathmin-1, -3, or -4 is observed.

Source: Monoclonal Mouse IgG2B Clone # 684433

Purification: Protein A or G purified from hybridoma culture supernatant

Immunogen: E. coli-derived recombinant human Stathmin-2/STMN2 Tyr26-Gly179 Accession # Q93045

Formulation: Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

*Small pack size (SP) is supplied either lyophilized or as a 0.2 μm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

Recommended Concentration Sample

Western Blot 0.05 μg/mL See Below

Immunohistochemistry 8-25 μg/mL See Below

DATA

Western Blot: Detection of Human Stathmin-2/STMN2 by Western Blot. Western blot shows lysates of SH-SY5Y human neuroblastoma cell line. PVDF membrane was probed with 0.05 μg/mL of Mouse Anti-Human Stathmin-2/STMN2 Monoclonal Antibody (Catalog # MAB6930) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). For additional reference, recombinant human Stathmin-1 and recombinant human Stathmin-2 (20 ng/lane) were included. A specific band was detected for Stathmin-2/STMN2 at approximately 25 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunohistochemistry: Stathmin-2/STMN2 in Human Liver. Stathmin-2/STMN2 was detected in immersion fixed paraffin-embedded sections of human liver using Mouse Anti-Human Stathmin-2/STMN2 Monoclonal Antibody (Catalog # MAB6930) at 15 μg/mL overnight at 4 °C. Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Specific staining was localized to hepatocytes. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.

PREPARATION AND STORAGE

Reconstitution: Sterile PBS to a final concentration of 0.5 mg/mL.

Shipping: The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

*Small pack size (SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C

Stability & Storage: Use a manual defrost freezer and avoid repeated freeze-thaw cycles.
- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Stathmin-2 (STMN2), also known as superior cervical ganglion 10 protein (SCG10), is a 19 kDa microtubule-stabilizing protein that is preferentially expressed in neurons. It promotes neuronal proliferation and migration as well as neurite outgrowth. Stathmin-2 contains a membrane attachment region (aa 1-26), a regulatory domain (aa 39-96), and an overlapping coiled-coil domain (aa 75-179). It is subject to phosphorylation of multiple serines within the regulatory domain. Within aa 26-179, human Stathmin-2 shares 100% and 99% aa sequence identity with mouse and rat Stathmin-2, respectively.