

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Urocortin in direct ELISAs and Western blots.
Source	Monoclonal Mouse IgG _{2B} Clone # 749606
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Urocortin Arg26-Lys124 (predicted) Accession # P55089
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 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	0.5 µg/mL	See Below
Immunohistochemistry	8-25 µg/mL	See Below

DATA

<p>Western Blot</p>	<p>Detection of Human Urocortin by Western Blot. Western blot shows lysates of SH-SY5Y human neuroblastoma cell line, HepG2 human hepatocellular carcinoma cell line, HeLa human cervical epithelial carcinoma cell line, and HEK293 human embryonic kidney cell line. PVDF membrane was probed with 0.5 µg/mL of Mouse Anti-Human Urocortin Monoclonal Antibody (Catalog # MAB7447) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for Urocortin at approximately 5 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 8.</p>	<p>Immunohistochemistry</p> <p>Urocortin in Human Brain. Urocortin was detected in immersion fixed paraffin-embedded sections of human brain using Mouse Anti-Human Urocortin Monoclonal Antibody (Catalog # MAB7447) at 15 µg/mL overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). 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 neuronal processes. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.</p>
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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. <ul style="list-style-type: none"> ● 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

Urocortin (UCN, UCN1) is a member of the widely expressed corticotropin releasing factor (CRF) peptide family that includes UCN1-3 and CRF. UCN stimulates cAMP and MAPK pathways via either of two G-protein coupled receptors, CRFR1 and CRFR2, while other family members prefer CRFR1 (CRF) or CRFR2 (UCN2, UCN3). In the brain, UCN has been implicated in counteracting stress-provoked anxiety and suppressing appetite. It also modulates metabolic activity in peripheral tissues and protects the heart from ischemia/reperfusion injury. The UCN cDNA encodes 124 aa, including a 25 aa signal sequence, a 57 aa propeptide, and a 42 aa mature active 5 kDa UCN peptide. The proform of human UCN (aa 26-124, 11 kDa predicted) shares approximately 80% aa sequence identity with mouse and rat UCN.