# Human/Mouse/Rat MCHR1 Antibody

Monoclonal Mouse $IgG_{2B}$ Clone # 1032149

Catalog Number: MAB79381

## DESCRIPTION

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|---|---|
| **Species Reactivity** | Human/Mouse/Rat |
| **Specificity** | Detects human MCHR1 in direct ELISAs. Detects human, mouse, and rat MCHR1 in Western blots. |
| **Source** | Monoclonal Mouse $IgG_{2B}$ Clone # 1032149 |
| **Purification** | Protein A or G purified from hybridoma culture supernatant |
| **Immunogen** | *E. coli*-derived human MCHR1<br>Met1-Pro113<br>Accession # Q99705 |
| **Formulation** | Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.<br>*Small pack size (-SP) is supplied either lyophilized or as a 0.2 μm filtered solution in PBS. |

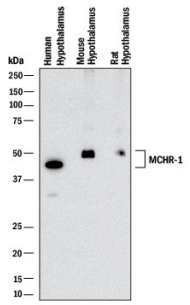
## APPLICATIONS

**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** | 1 µg/mL | Human hypothalamus tissue, Mouse hypothalamus tissue, and Rat hypothalamus tissue |
| **Immunohistochemistry** | 5-25 µg/mL | Immersion fixed paraffin-embedded sections of human brain (hypothalamus) |

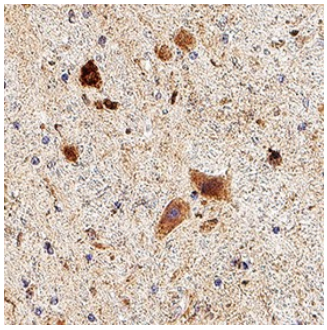
## DATA

### Western Blot




**Detection of Human, Mouse, and Rat MCHR1 by Western Blot.** Western blot shows lysates of human hypothalamus tissue, mouse hypothalamus tissue, and rat hypothalamus tissue. PVDF membrane was probed with 1 µg/mL of Mouse Anti-Human/Mouse/Rat MCHR1 Monoclonal Antibody (Catalog # MAB79381) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for MCHR1 at approximately 46 kDa (as indicated). This experiment was conducted under reducing conditions and using Western Blot Buffer Group 1.

### Immunohistochemistry



**MCHR1 in Human Brain (Hypothalamus).** MCHR1 was detected in immersion fixed paraffin-embedded sections of human brain (hypothalamus) using Mouse Anti-Human/Mouse/Rat MCHR1 Monoclonal Antibody (Catalog # MAB79381) at 5 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Mouse IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC001). 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 DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to cytoplasm in neurons. Staining was performed using our protocol for IHC Staining with VisUCyte HRP Polymer Detection Reagents.

## PREPARATION AND STORAGE

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| **Reconstitution** | Reconstitute at 0.5 mg/mL in sterile PBS. |
| **Shipping** | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.<br>*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.**<br>• 12 months from date of receipt, -20 to -70 °C as supplied.<br>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.<br>• 6 months, -20 to -70 °C under sterile conditions after reconstitution. |

## BACKGROUND

MCHR1 (Melanin-concentrating Hormone Receptor-1), also called GPR24 (G-protein Coupled Receptor 24) or SLC1 (Somatostatin Receptor-like 1), is an approximately 44 kDa, seven-transmembrane receptor for MHC. It is most highly expressed in the brain but is also present in peripheral tissues. Engagement of MHCR1 has effects on food intake, energy homeostasis, anxiety and depression, such that rodents treated with small molecule antagonists weigh less and show reduced anxiety and depression in model systems than untreated rodents. Human MCHR1 shares 74% amino acid (aa) sequence identity with mouse MCHR1 between aa 1-113, and 82% with rat MCHR1 between aa 71-113.



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