

Mibavademab Biosimilar - Research Grade

Product Code: ICH5258

More Information

Species Reactivity: Human

Target: LEPR

Concentration: >1mg/ml

Isotype: Human IgG4 - kappa

Host: CHO Cells

product name H2: Mibavademab Biosimilar - Research Grade

Sequence: <https://www.imgt.org/mAb-DB/>

Buffer: ICH3002

UniProt: P48357

Shipping Conditions: Blue ice

background: This product is an unconjugated, non-therapeutic recombinant analog of the anti-leptin-receptor antibody mibavademab, supplied strictly for research use only. It is a fully human IgG4-kappa immunoglobulin built around the human leptin receptor (LEPR, UniProt P48357), reproducing the binding specificity of the originator molecule so that laboratories can study receptor engagement, agonism, and downstream leptin-pathway signalling without sourcing clinical material. It is not the clinical drug and is not intended for human or veterinary use. Typical applications include use as a defined binding reagent, a positive or isotype-matched comparator in receptor-interaction and cell-based assays, a tool for ADCC/ADC method development, and a reference standard in preclinical and formulation work. The material is provided at research grade with low endotoxin (1 EU/mg; ultra-low 0.5 EU/mg options), enabling sensitive cell-based and in-vivo-standard experiments, and is

available in bulk milligram-to-gram quantities to support assay development, screening campaigns, and scale-up. Formats and buffer conditions can be selected to suit downstream workflows. LEPR (the leptin receptor, UniProt P48357) is a single-pass type I transmembrane receptor of the class I cytokine receptor family that binds the adipocyte-derived hormone leptin. The long signalling isoform (LEPRb) is enriched in hypothalamic neurons and, upon leptin binding, activates the associated Janus kinase JAK2, driving phosphorylation and activation of STAT3 (and STAT5), the SHP2/ERK cascade, and PI3K signalling, while SOCS3 provides negative feedback. Through these pathways leptin-LEPR signalling regulates food intake, energy expenditure, body-weight homeostasis, neuroendocrine function, and immune and reproductive processes. Shorter isoforms have limited signalling capacity and contribute to transport and clearance. Loss-of-function mutations cause severe early-onset obesity, and impaired leptin action underlies the metabolic disturbances seen in lipodystrophy, making LEPR an important target for agonist approaches that restore receptor activation.

Other names: HuB219, OB receptor, OB-R, Leptin receptor, DB

Specificity: Detects human LEPR

Purification Method: This monoclonal antibody was purified using Protein A

Formulation: Sterile, preservative-free, solution in PBS. BSA and Azide free.

Purity: >95% by SDS-PAGE

Endotoxin: ≤ 1.0 EU/mg as determined by the LAL method

Storage: This biosimilar is stable when stored at 2-8°C. For longer term storage (> 3 months) it is recommended to store this antibody at -20°C or -70°C.

Applications: Functional Assays

Application Notes: This biosimilar is for research use only (RUO): it is not for diagnostic or therapeutic procedures and cannot be purchased by patients.

Use: Products are for research use only. Not for use in diagnostic or therapeutic procedures.