

IVMB0414

Product Information

Product SKU: IVMB0414	Clone: hu3F8	Target: GD2
Size: 500 µg		Isotype: Human IgG1k

Additional Information

Reactivity: Human	Host Species: Human
Antibody Type: Biosimilar Recombinant Human Monoclonal Antibody	Expression Host: HEK-293 Cells

Immunogen Information

Background: Neuroblastoma is an extracranial childhood cancer that accounts for 12% of cancer deaths in children ¹. Neuroblastomas highly express the antigen GD2, a glycolipid that assists in the attachment of tumor cells to the extracellular matrix ².

Naxitamab (hu3F8) is a humanized IgG1 anti-GD2 monoclonal antibody developed for the treatment of neuroblastoma, osteosarcoma, and other GD2-positive cancers ³. Naxitamab was engineered by grafting the complementarity determining regions of murine 3F8 (m3F8) onto human IgG1 frameworks and optimizing the sequences for stability, binding kinetics to GD2, and efficiency in antibody dependent cell-mediated cytotoxicity (ADCC) ⁴. Naxitamab demonstrates direct cytotoxicity against neuroblastoma cell line LAN-1 in vitro and induces complement dependent cytotoxicity as well as ADCC ^{3,4}. Naxitamab has low level cross-reactivity with the ganglioside GD1b and no cross-reactivity with human N-CAM ⁴.

The chemical name for naxitamab is immunoglobulin G1, anti-(ganglioside GD2) (humanized mus musculus clone hu3f8 gamma1-chain), disulfide with humanized mus musculus clone hu3f8 light-chain, dimer ³.

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

Applications: in vivo

Synonyms:	human ganglioside GD2, disialoganglioside
Antigen Distribution:	GD2 is a cell surface glycolipid present in low concentrations on skin, neural, or peripheral nerve cell surfaces. GD2 is overexpressed on neuroblastoma cells, most melanoma, and some other tumors.
Immunogen:	Human GD2
Formulation:	This biosimilar antibody is aseptically packaged and formulated in 0.01 M phosphate buffered saline (150 mM NaCl) PBS pH 7.2 - 7.4 with no carrier protein, potassium, calcium or preservatives added. Due to inherent biochemical properties of antibodies, certain products may be prone to precipitation over time. Precipitation may be removed by aseptic centrifugation and/or filtration.
Specificity:	This non-therapeutic biosimilar antibody uses the same variable region sequence as the therapeutic antibody Naxitimab. Clone hu3F8 recognizes Human GD2. This product is for research use only.
Recommended Isotype	Human IgG1
Controls:	
Storage & Handling:	Functional grade biosimilar antibodies may be stored sterile as received at 2-8°C for up to one month. For longer term storage, aseptically aliquot in working volumes without diluting and store at -80°C. Avoid Repeated Freeze Thaw Cycles.