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Human Nectin-4 (Enfortumab) Antibody

Biosimilar Recombinant Human Monoclonal Antibody

Product Information

Product No.:	E380
Clone:	AGS-22M6E
Isotype:	Human IgG1κ
Storage:	Sterile 2 to 8°C

Product Description

Specificity:
This non-therapeutic biosimilar antibody uses the same variable region sequence as the therapeutic antibody Enfortumab. This product is research use only. AGS-22M6E activity is directed against human Nectin-4.

Antigen Distribution:
Nectin-4 is expressed in various tissues, particularly in epithelial cells. It is also expressed in certain types of cancer, making it a potential target for cancer therapeutics.

Background:
Nectin-4 is a member of the Nectin family of immunoglobulin-like cellular adhesion molecules. They play a critical role in the formation and maintenance of tight junctions. These important proteins are homologs to the poliovirus receptor with Nectin-4 also known as poliovirus receptor-related protein 4 (PVRL4)1.

Nectin-4 is often overexpressed in a variety of cancers such as breast, lung, urothelial, colorectal, pancreatic, ovarian, and gastric cancers. It plays a role in cancer progression by influencing various processes such as cell proliferation, angiogenesis (formation of blood vessels) metastasis (spread to other parts of the body), and DNA repair. Given the critical role that Nectin-4 plays in cancer progression, targeting it has emerged as a promising approach for treating cancer. There have been several studies that have investigated the efficacy of Nectin-4-targeted therapies2 - 7.

AGS-22M6E (Enfortumab Vedotin) is an antibody-drug conjugate (ADC) designed to target cancer cells with high levels of Nectin-4 expression. It consists of an antibody against Nectin-4 linked to MMAE, which disrupts microtubules within the cell. Upon entering cancer cells, the ADC releases MMAE and causes cell death by disrupting the microtubule network. AGS 22M6E has received accelerated approval from the FDA for the treatment of cancer and has shown potential in clinical applications8 - 10.

Known Reactivity Species:
Human

Expression Host:
HEK-293 Cells

Format:
Purified No Carrier Protein

Immunogen:
Human Nectin-4

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.

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Purity
≥95% monomer by analytical SEC, >95% by SDS Page

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

Storage and Stability
Functional grade preclinical 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 ≤ -70°C.
Avoid Repeated Freeze Thaw Cycles.

Product Preparation
Recombinant biosimilar antibodies are manufactured in an animal free facility using only in vitro protein free cell culture techniques and are purified by a multi-step process including the use of protein A or G to assure extremely low levels of endotoxins, leachable protein A or aggregates.

Pathogen Testing
To protect mouse colonies from infection by pathogens and to assure that experimental preclinical data is not affected by such pathogens, all of Leinco's recombinant biosimilar antibodies are tested and guaranteed to be negative for all pathogens in the IDEXX IMPACT I Mouse Profile.

Other Applications Reported in Literature:
ELISA,
WB

Country of Origin
USA

References
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