Leinco Technologies, Inc.
excellence in early discovery research™

# Human CD19 (Loncastuximab) Antibody

## *Purified No Carrier Protein*

Biosimilar Recombinant Human Monoclonal Antibody

### Product Information

**Product No.:** C3160
**Clone:** ADCT-402
**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 Loncastuximab. ADCT-402 specifically targets the CD19 antigen, which is expressed on the surface of B cells.

### Antigen Distribution:

CD19 is expressed on all B lineage cells, from early pre-B cells to mature B cells.

### Background:

CD19 is a 95 kDa type I transmembrane glycoprotein found on the surface of B cells at all stages of their growth into plasma cells. It works as a co-receptor alongside the B cell receptor (BCR) and is essential in activating, growing, and transforming B cells. CD19 assists in lowering the threshold for BCR signaling, making B cells more sensitive to antigens. Because of its crucial involvement in the life of B cells, CD19 is an important marker for identifying B cell lineage and is a target for treatments focusing on B cell-related cancers[1-7].

ADCT-402, also known as loncastuximab tesirine, is an antibody-drug conjugate (ADC) that targets CD19-expressing cells. It is made up of a humanized monoclonal antibody that targets CD19 and is linked to a pyrrolobenzodiazepine (PBD) dimer cytotoxin. When ADCT-402 binds to CD19- expressing cells, it is taken inside the cell, and the cytotoxin is released, leading to DNA crosslinking and cell death. This targeted approach allows for strong and selective anti-tumor activity against CD19-expressing blood cancers, such as B-cell lymphomas and leukemias[8,9].

This non-therapeutic biosimilar is not a drug conjugate and thus does not contain the cytotoxin PDB.

### Known Reactivity Species:

Human

### Expression Host:

HEK-293 Cells

### Format:

Purified No Carrier Protein

### 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.

### Purity

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


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## 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 to 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:
**WB**

## Country of Origin
USA

## References
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