

YR0163

Leader in Biomolecular Solutions for Life Science



Human DLL3 Monoclonal Antibody

Catalog No.: YR0163

Basic Information

Molecular Weight

150 kDa

Endotoxin

<1EU/mg (<0.001EU/μg) Determined by LAL gel clotting assay

Sterility

0.2 μm filtration

Aggregation

<5% Determined by SECP

Purity

>95% Determined by SDS-PAGE

Background

Rovalpituzumab is a humanized IgG1-kappa monoclonal antibody against the human Delta-like 3 protein (DLL3), which is an atypical Notch ligand that has been implicated in regulation of cell development and cell fate decisions, and is a downstream target of achaetescute homolog-1 (ASCL1), suggesting its role in neuroendocrine tumorigenesis. DLL3 is expressed in more than 80% of patients with small-cell lung cancer (SCLC) and other neuroendocrine tumors, but has little to no expression in normal tissues or non-neuroendocrine tumor types. DLL3 expression appears to be stable over time in SCLC tumors pre- and post-chemotherapy. Although DLL3 is mostly found within the Golgi apparatus under physiological conditions, it may reach the cell surface in case of overexpression and lead to Notch inhibition in cis. Rovalpituzumab tesirine (Rova-T) is a first-in-class antibody-drug conjugate (ADC) against DLL3, and composed of SC16, a humanized IgG1 antibody against DLL3, conjugated to the cytotoxic pyrrolobenzodiazepine (PBD) dimer D6.5 (SC-DR002) via a protease-cleavable linker. Rova-T selectively binds to DLL3 on target-expressing cells, is internalized, and upon proteolytic cleavage releases the toxin. PBD dimers then bind to the DNA minor groove where they form covalent adducts causing stalling of the replication forks, cell-cycle arrest at the G2-M boundary, and apoptosis. Rovalpituzumab biosimilar uses the same protein sequences as the therapeutic antibody rovalpituzumab.

Reported Applications

ELISA, neutralization, functional assays such as bioanalytical PK and ADA assays, and those assays for studying biological pathways

Immunogen Information

Clone

Rovalpituzumab Biosimilar

Isotype

Human IgG1 kappa

Immunogen

Human DLL3

Recommended Isotype Control(s)

In Vivo Grade Recombinant Human IgG1 Kappa Isotype Control Antibody

Recommended Dilution Buffer

1×PBS pH 7.4

Contact



www.abclonal.com

Product Information

Production

Purified from cell culture supernatant in an animal-free facility

Purification

Protein A or G purification

Storage

Store at 2 - 8°C. 2 - 8°C for up to 4 weeks and -80°C for long term storage (Avoid repeated freezing and thawing)