

Catalog# BP- 50507

Rovalpituzumab Biosimilar (Human DLL3 Monoclonal Antibody)

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.

Product Details	
CAS No.	1613313-01-1
Species Reactivity	Human
Source	Mammalian cells
Isotype	Human IgG1 kappa
Class	Monoclonal
Type	Antibody
Clone	Rovalpituzumab Biosimilar
Conjugate	Unconjugated
Immunogen	Human DLL3 protein
Purity	>95%
Molecular Weight	145.02 kDa
Protein Concentration	1 mg/ml
Formulation	0.2 µM filtered PBS solution, pH 7.4
Storage conditions	4°C for short time, -20°C or -80°C for long time.