



Anti-FUT3 (clone cBR96)-hydrazono-doxorubicin ADC

Cat. No: ADC-W-423

Antibody clone #: BR96

PRODUCT INFORMATION

This ADC product is comprised of an anti-FUT3 monoclonal antibody (clone cBR96) conjugated via a hydrazone linker to adoxorubicin. The doxorubicin is targeted to certain cancers by immunorecognition and delivered into cancer cells via receptor mediated endocytosis. Within the cell, doxorubicin binds to DNA, causes DNA damage.

ADC Target

Name:	FUT3
Alternative Names:	FUT3; fucosyltransferase 3 (galactoside 3(4)-L-fucosyltransferase, Lewis blood group); LE; Les; FT3B; CD174; FucT-III; galactoside 3(4)-L-fucosyltransferase; Lewis FT; fucosyltransferase III; alpha-(1,3/1,4)-fucosyltransferase; blood group Lewis alpha-4-f
Target Entrez Gene ID:	2525
Target UniProt ID:	A8K737
Overview:	The Lewis histo-blood group system comprises a set of fucosylated glycosphingolipids that are synthesized by exocrine epithelial cells and circulate in body fluids. The glycosphingolipids function in embryogenesis, tissue differentiation, tumor metastasis, inflammation, and bacterial adhesion. They are secondarily absorbed to red blood cells giving rise to their Lewis phenotype. This gene is a member of the fucosyltransferase family, which catalyzes the addition of fucose to precursor polysaccharides in the last step of Lewis antigen biosynthesis. It encodes an enzyme with alpha(1,3)-fucosyltransferase and alpha(1,4)-fucosyltransferase activities. Mutations in this gene are responsible for the majority of Lewis antigen-negative phenotypes. Multiple alternatively spliced variants, encoding the same protein, have been found for this gene.

ADC Antibody

Overview: Anti-FUT3 IgG3 Antibody, clone # BR96

Clone #: BR96

Species Reactivity: Mouse

ADC Linker

Name: hydrazone

Description: Acid-labile linkers, belonging to chemically cleavable linkers, are designed based on a pH-dependent release mechanism and remain intact during systemic circulation in the blood's neutral pH environment (pH 7.3-7.5) but to undergo hydrolysis and release drug once the ADC is internalized into mildly acidic endosomal (pH 5.0-6.5) and lysosomal (pH 4.5-5.0) compartments of the cell.

ADC payload drug

Name: doxorubicin

Description: Doxorubicin is the generic name for the trade name drug, Adriamycin®, as well as, Rubex®, which is a type of anti-cancer chemotherapy drug called an anthracycline. Doxorubicin works by blocking an enzyme called Topoisomerase that cancer cells need to divide and grow.

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