

Polyclonal Anti- FUT1 Picoband™ Antibody

Catalog Number: PB9593

Description

Gene Name	fucosyltransferase 1 (galactoside 2-alpha-L-fucosyltransferase, H blood group)
Recommended Protein Name	Galactoside 2-alpha-L-fucosyltransferase 1
Lot No.	0951512Da899385
Size	100µg/vial
Form	lyophilized
Ig type	Rabbit IgG
Specificity	No cross reactivity with other proteins.
Purification	Immunogen affinity purified.
Species	Reacts with: human, mouse, rat
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human FUT1 (134-164aa EVDSRTPWRELQLHDWMSEEYADLRDPFLKL), different from the related mouse and rat sequences by seven amino acids.
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .

Application

	Concentration	Tested Species	Antigen Retrieval
Western blot	0.1-0.5µg/ml	Hu, Rat	-
Immunohistochemistry (Paraffin-embedded Section)	0.5-1µg/ml	Hu, Ms, Rat	By Heat

Tested Species: In-house tested species with positive results.

By Heat: Boiling the paraffin sections in 10mM citrate buffer, pH6.0, for 20mins is required for the staining of formalin/paraffin sections.

Other applications have not been tested.

Optimal dilutions should be determined by end users.

Preparation and storage

Reconstitution: 0.2ml of distilled water will yield a concentration of 500µg/ml.

Storage: At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time.

Avoid repeated freezing and thawing.

Relevant detection systems

Boster provides a series of assays reacted with primary antibodies. Antibody can be supported by chemiluminescence kit EK1002 in WB, supported by SA1022 in IHC(P).

Background

Galactoside 2-alpha-L-fucosyltransferase 1 is an enzyme that in humans is encoded by the FUT1 gene. It is mapped to 19q13.3. The protein encoded by this gene is a Golgi stack membrane protein that is involved in the creation of a precursor of the H antigen, which is required for the final step in the soluble A and B antigen synthesis pathway. This gene is one of two encoding the galactoside 2-L-fucosyltransferase enzyme. Mutations in this gene are a cause of the H-Bombay blood group.

Reference

1. "Entrez Gene: FUT1 fucosyltransferase 1 (galactoside 2-alpha-L-fucosyltransferase, H blood group)".
2. Ball SP, Tongue N, Gibaud A et al. (1992). "The human chromosome 19 linkage group FUT1 (H), FUT2 (SE), LE, LU, PEPD, C3, APOC2, D19S7 and D19S9". *Ann. Hum. Genet.* 55 (Pt 3): 225–33.
3. Yip SP, Chee KY, Chan PY et al. (2003). "Molecular genetic analysis of para-Bombay phenotypes in Chinese: a novel non-functional FUT1 allele is identified". *Vox Sang.* 83 (3): 258–62.