

Recombinant Rat Cd5, Fc-tagged

Cat. No. Cd5-8797R **Lot. No.** (See product label)

SPECIFICATION

Product Overview	A DNA sequence encoding the rat FZD4 (Q9QZH0) (Met1-Glu181) was expressed with the Fc region of human IgG1 at the C-terminus.
Species	Rat
Source	Human Cells
ProteinLength	1-181 a.a.
Description	FZD4, also known as CD344, belongs to the the frizzle family. Members of this family encode seven-transmembrane domain proteins that are receptors for the Wingless type MMTV integration site family of signaling proteins. Most of frizzled receptors are coupled to the beta-catenin (CTNNB1) canonical signaling pathway, which leads to the activation of disheveled proteins, inhibition of GSK-3 kinase, nuclear accumulation of beta-catenin (CTNNB1) and activation of Wnt target genes. FZD4 is the receptor for Wnt proteins. In retina, it can be both activated by Wnt protein-binding, but also by a Wnt-independent signaling via binding of norrin, promoting in both cases beta-catenin (CTNNB1) accumulation and stimulation of LEF/TCF-mediated transcriptional programs. FZD4 plays a critical role in retinal vascularization by acting as a receptor for Wnt proteins and norrin.
Predicted N Terminal	Phe 38
Form	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose and mannitol are added as protectants before lyophilization.

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Molecular Mass	The recombinant rat FZD4 is a disulfide-linked homodimer. The reduced monomer comprises 385 amino acids and has a predicted molecular mass of 43.2 kDa. The apparent molecular mass of the protein is approximately 113, 58 and 36 kDa in SDS-PAGE under reducing conditions.
Endotoxin	1.0 eu/μg of the protein as determined by the lal
Purity	>(13.3+78.9+5.2)% as determined by SDS-PAGE
Stability	Samples are stable for up to twelve months from date of receipt at -70°C
Storage	Store it under sterile conditions at -70°C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

GENE INFORMATION

Gene Name	Cd5 Cd5 molecule [Rattus norvegicus]
Official Symbol	Cd5
Synonyms	CD5; Cd5 molecule; T-cell surface glycoprotein CD5; CD5 antigen; Lymphocyte antigen CD5; MGC114334;
Gene ID	54236
mRNA Refseq	NM_019295
Protein Refseq	NP_062168
Pathway	B Cell Receptor Signaling Pathway, organism-specific biosystem; Hematopoietic cell lineage, organism-specific biosystem; Hematopoietic cell lineage, conserved

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biosystem; T Cell Receptor Signaling Pathway, organism-specific biosystem;

Function

glycoprotein binding; scavenger receptor activity;

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