

Recombinant Rat Prom1 Protein, Fc-tagged, Alexa Fluor 555 conjugated

Cat. No. Prom1-120RAF555 **Lot. No.** (See product label)

SPECIFICATION

Product Overview	A DNA sequence encoding the rat PROM1 (F1MAN1) (Asn171-Tyr424) (Alexa Fluor 555 conjugated) was with the Fc region of mouse IgG1 at the N-terminus.
Species	Rat
Source	HEK293
ProteinLength	490
Description	CD133, also known as PROM1 and Prominin 1, is a pentaspan transmembrane glycoprotein which belongs to the prominin family. It localizes to membrane protrusions and is often expressed on adult stem cells. CD133 is known to play a role in maintaining stem cell properties by suppressing differentiation. CD133 binds cholesterol in cholesterol-containing plasma membrane microdomains. It is proposed to play a role in apical plasma membrane organization of epithelial cells. CD133 is also involved in regulation of MAPK and Akt signaling pathways. Mutations in PROM1 gene have been shown to result in retinitis pigmentosa and Stargardt disease. PROM1 gene is expressed from at least five alternative promoters that are expressed in a tissue-dependent manner. Expression of this gene is also associated with several types of cancer.
Form	Lyophilized
Molecular Mass	The recombinant rat PROM1 comprises 490 amino acids and predicts a molecular

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mass of 55.1 kDa. The apparent molecular mass of the recombinant protein is approximately 67 and 34 kDa in SDS-PAGE under reducing conditions due to glycosylation.

N-terminal Sequence Analysis

Asp

Endotoxin

< 1.0 EU/ µg of the protein as determined by the LAL method.

Purity

(79.2+14.5) % as determined by SDS-PAGE

Characteristic

Disulfide-linked homodimer

Labeled with Alexa Fluor 555 via amines

With an excitation and emission maximum of 555/565 nm, Alexa Fluor 555 can be efficiently excited using a 543 nm He-Ne laser line and detected under standard TRITC/Cy3 filters.

Stability

Samples are stable for up to 12 months from date of receipt at -70 centigrade.

Storage

Store it under sterile conditions at -70 centigrade. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

Storage Buffer

Lyophilized from sterile PBS, pH 7.4.

Conjugation

Alexa Fluor 555

GENE INFORMATION

Gene Name

Prom1 prominin 1 [*Rattus norvegicus* (Norway rat)]

Official Symbol

Prom1

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Synonyms	Prom1; Prom; CD133; prominin 1; fudanine
Gene ID	60357
mRNA Refseq	NM_021751
Protein Refseq	NP_068519

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