

Recombinant Rat Prom1, His-tagged

Cat. No. Prom1-121R **Lot. No.** (See product label)

SPECIFICATION

Product Overview	A DNA sequence encoding the rat PROM1 (F1MAN1) (Asn171-Tyr424) was expressed with a polyhistidine tag at the N-terminus.
Species	Rat
Source	Human Cells
ProteinLength	171-424 a.a.
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.
Predicted N Terminal	His
Form	Lyophilized from sterile PBS, pH 7.4.

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Molecular Mass	The recombinant rat PROM1 comprises 274 amino acids and predicts a molecular mass of 30.9 kDa. The apparent molecular mass of the recombinant protein is approximately 47-57 kDa in SDS-PAGE under reducing conditions.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method
Purity	> 90 % 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.
Reconstitution	A hardcopy of COA with reconstitution instruction is sent along with the products. Please refer to it for detailed information.

GENE INFORMATION

Gene Name	Prom1 prominin 1 [<i>Rattus norvegicus</i> (Norway rat)]
Official Symbol	Prom1
Synonyms	Prom1; Prom; CD133; prominin 1; fudeneine
Gene ID	60357
mRNA Refseq	NM_021751
Protein Refseq	NP_068519
Chromosome	14q21

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Location	
Pathway	Transcriptional misregulation in cancer
Function	actinin binding; cadherin binding; molecular_function

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA