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### Recombinant Human BCAM Protein(His Tag)

### Catalog Number: PDMH100294

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description	
Species	Human
Source	Mammalian-derived Human BCAM protein Glu32-Ala547, with an C-terminal His
Calculated MW	56.6 kDa
Observed MW	80 kDa
Accession	P50895
Bio-activity	Not validated for activity
Properties	
Purity	>90% as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU/mg of the protein as determined by the LAL method
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80
	°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of
	reconstituted samples are stable at $< -20^{\circ}C$ for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 $\mu$ m filtered solution in PBS with 5% Trehalose and 5%
	Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of
	0.5 mg/mL. Concentration is measured by UV-Vis.

Data

kDa	MR
80	Hu
60	
40	-
30	-
20	-
12	-

SDS-PAGE analysis of Human BCAM proteins , 2µg/lane of Recombinant Human BCAM proteins was resolved with SDS-PAGE under reducing conditions , showing bands at 80KD

#### Background

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The Lutheran (Lu) blood group and basal cell adhesion molecule (BCAM) antigens are both carried by 2 glycoprotein isoforms of the immunoglobulin superfamily representing receptors for the laminin alpha(5) chain. It is a transmembrane receptor with five immunoglobulin-like domains in its extracellular region , and is therefore classified as a member of the immunoglobulin (Ig) gene family. In addition to red blood cells , Lu/BCAM proteins are expressed in endothelial cells of vascular capillaries and in epithelial cells of several tissues. BCAM/LU has a wide tissue distribution with a predominant expression in the basal layer of the epithelium and the endothelium of blood vessel walls. As designated as CD239 recently , BCAM and LU share a significant sequence similarity with the CD146 (MUC18) and CD166 , and themselves are adhesion molecules that bind laminin with high affinity. Laminins are found in all basement membranes and are involved in cell differentiation , adhesion , migration , and proliferation. BCAM is upregulated following malignant transformation of some cell types in vivo and in vitro , thus being a candidate molecule involved in tumor progression. In addition , BCAM interacts with integrin in sickle red cells , and thus may potentially play a role in vaso-occlusive episodes.