## 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		
	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	м	R
80 60	-	No.
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.