

Recombinant Human BCAM Protein (His Tag)

Catalog Number: PKSH033754

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

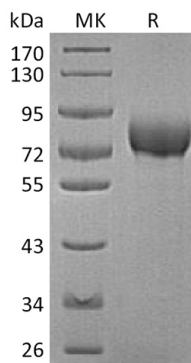
Description

Species	Human
Source	HEK293 Cells-derived Human BCAM protein Glu32-Ala547, with an C-terminal His
Calculated MW	57.0 kDa
Observed MW	72-85 kDa
Accession	P50895
Bio-activity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg 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°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.
Reconstitution	Please refer to the specific buffer information in the printed manual. Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

Basal cell adhesion molecule (BCAM, CD239) is an immunoglobulin superfamily protein that arises from alternate splicing of the Lutheran blood group molecule (Lu). The ECD of human BCAM contains two Ig-like V-type domains and three Ig-like C2-type domains. It shares 73% aa sequence identity with the ECDs of mouse and rat BCAM. BCAM is widely expressed in epithelial and endothelial tissues including in the vasculature, kidney glomerulus, small intestine, colon, hair follicle outer root sheath, and basal keratinocytes of the skin during inflammation. BCAM is also expressed on vascular and visceral smooth muscle cells and at the neuromuscular junction of skeletal muscle. BCAM is upregulated on carcinomas, particularly ovarian, sarcomas, astrocytomas, and melanomas. It may mediate intracellular signaling. It cooperates with Integrins $\beta 1$ and $\alpha V\beta 3$ as an adhesion receptor for Laminins which contain the $\alpha 5$ chain. The Lutheran isoform is aberrantly phosphorylated in erythroid disorders and can enhance Laminin-mediated adhesion of erythrocytes to vascular endothelial cells.