



Recombinant Protein Technical Manual

Recombinant Human BCAM Protein (His Tag)

RPES4316

Product Data:

Product SKU: RPES4316

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: P50895

Protein Information:

Molecular Mass: 57 kDa

AP Molecular Mass: 72-85 kDa

Tag: C-His

Bio-activity:

Purity: > 95% as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°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, pH7.4.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Basal cell adhesion molecule; Auberger B antigen; B-CAM cell surface glycoprotein; F8/G253 antigen; Lutheran antigen; Lutheran blood group glycoprotein; CD239; BCAM; LU; MSK19

Immunogen Information:

Sequence: Glu32-Ala547

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 Lamininmediated adhesion of erythrocytes to vascular endothelial cells.