Elabscience®

Recombinant Mouse BAFF protein(His Tag)

Catalog Number: PKSM041485

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

Description	
Species	Mouse
Source	E coli-derived Mouse BAFF protein Ala 127-Leu 309, with an C-terminal His
Calculated MW	21.6 kDa
Observed MW	17-25 kDa
Accession	Q9WU72
Bio-activity	Measure by its ability to induce proliferation in mouse B cells. The ED_{50} for this effect
	is <0.5 ng/mL. The specific activity of recombinant mouse BAFF is > 2 x 10^6 IU/mg.
Properties	
Purity	> 98 % as determined by reducing SDS-PAGE.
Endotoxin	< 0.1 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 $< -20^{\circ}C$ for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4.
	Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants
	before lyophilization.
	Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.
Data	
	kDa
	75-
	63- 48-
	40- 35-
	25-
	17-
	11-

> 98 % as determined by reducing SDS-PAGE.

Background

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TNFSF13B/TNFSF20 belongs to the tumor necrosis factor family. It abundantly is expressed in peripheral blood Leukocytes and is specifically expressed in monocytes and macrophages. Also found in the spleen, lymph node, bone marrow, T-cells and dendritic cells. A lower expression seen in placenta, heart, lung, fetal liver, thymus, and pancreas. Isoform 2 is expressed in many myeloid cell lines. A third B-cell specific BAFF-receptor (BAFFR/BR3) promotes the survival of mature B-cells and the B-cell response. Isoform 2 seems to inhibit isoform 1 secretion and bioactivity. Isoform 3 acts as a transcription factor for its own parent gene, in association with NF-kappa-B p50 subunit, at least in autoimmune and proliferative B-cell diseases. The presence of Delta4BAFF is essential for soluble BAFF release by IFNG/IFN-gamma-stimulated monocytes and for B-cell survival. It can directly or indirectly regulate the differential expression of a large number of genes involved in the innate immune response and the regulation of apoptosis. Isoform 2 heteromultimerizes with isoform 1, probably limiting the amount of functional isoform 1 on the cell surface. Isoform 3 is unlikely form trimers or bind to BAFF receptors. Mature human BAFF consists of a 46 amino acid (aa) cytoplasmic domain, a 21 aa transmembrane segment, and a 218 aa extracellular domain (ECD) with a stalk region and one TNF-like domain. Within aa 134-285 of the ECD, human BAFF shares 72% aa sequence identity with mouse BAFF.