

Cytokines

Human Recombinant BAFF

B cell activating factor

Catalog #	78002	10 µg
	78002.1	50 µg
	78002.2	1000 µg



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TOLL FREE PHONE 1 800 667 0322 • PHONE +1 604 877 0713

INFO@STEMCELL.COM • TECHSUPPORT@STEMCELL.COM

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Product Description

B cell activating factor (BAFF) is part of the tumor necrosis factor (TNF) superfamily and is expressed by monocytes, macrophages, dendritic cells, and neutrophils (Mackay & Browning; Scapini et al.). It binds to 3 receptors: BAFF-R, TACI, and BCMA, all of which are expressed by B cells at various times in their development (Liu & Davidson). BAFF-R signaling activates the NF-κB signaling pathway, and promotes B cell survival, Ig class switching, and antigen presentation (Bossen & Schneider; Liu & Davidson; Naradikian et al.). BAFF also has functions in other cell types: it promotes monocyte survival and activation, proinflammatory cytokine secretion, and differentiation into macrophages (Chang et al.), and co-stimulates anti-CD3-mediated activation of human T cells (Huard et al.; Mackay & Leung).

Product Information

Alternative Names:	BlyS, TALL1, TNFSF13B
Accession Number:	Q9Y275
Amino Acid Sequence:	AVQGP EETVT QDCLQLIADS ETPTIQKGSY TFPWLLSFK RGSAL E EKEN KILVKETGYF FIYGQVLYTD KTYAMGHLIQ RKKVHVFGDE LSLVTLFRCI QNMPETLPNN SCYSAGIAKL EEGDELQLAI PRENAQISLD GDVTFFGALK LL
Predicted Molecular Mass:	17 kDa
Species:	Human
Cross Reactivity:	Mouse
Formulation:	Lyophilized after dialysis against phosphate-buffered saline.
Source:	CHO

Specifications

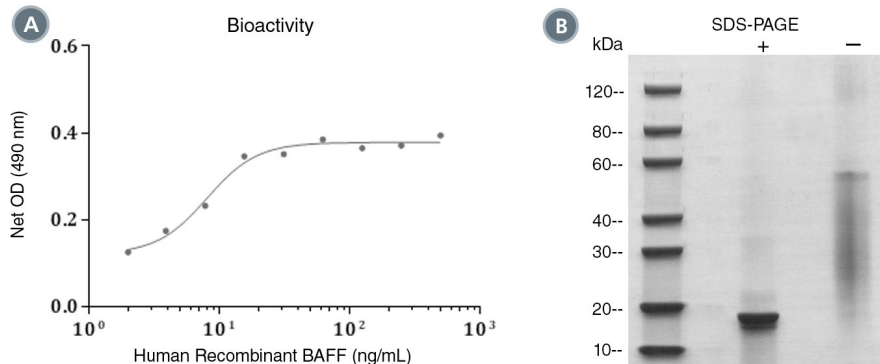
Activity:	The specific activity is $\geq 5 \times 10^4$ units/mg ($EC_{50} \leq 20$ ng/mL) as determined by a cell proliferation assay using RPMI-8226 cells.
Purity:	$\geq 95\%$
Endotoxin Level:	Measured by kinetic Limulus amoebocyte lysate (LAL) analysis and is ≤ 0.2 EU/µg protein.

Preparation and Storage

Storage:	Store at -80°C.
Stability:	Stable as supplied for 12 months from date of receipt.
Preparation:	Centrifuge vial before opening. Reconstitute the product in sterile water to at least 0.1 mg/mL by pipetting the solution down the sides of the vial. Do not vortex.

OPTIONAL: After reconstitution, if product will not be used immediately, dilute with concentrated bovine serum albumin (BSA) to a final BSA concentration of 0.1%. The effect of storage of stock solution on product performance should be tested for each application. As a general guide, do not store at 2 - 8°C for more than 1 week or at -20°C for more than 2 months. Avoid repeated freeze-thaw cycles.

Data



(A) The biological activity of Human Recombinant BAFF was tested by its ability to promote mitosis of RPMI-8226 cells in the presence of 0.1 mM dexamethasone. Mitogenic activity was measured using a fluorometric assay method. The EC₅₀ is defined as the effective concentration of the growth factor at which mitogenic activity is at 50% of maximum. The EC₅₀ in the above example is less than 20 ng/mL.

(B) 1 µg of Human Recombinant BAFF was resolved with SDS-PAGE under reducing (+) and non-reducing (-) conditions visualized by Coomassie Blue staining. Human Recombinant BAFF has a predicted molecular mass of 17 kDa.

Related Products

For a complete list of cytokines, as well as related products available from STEMCELL Technologies, visit www.stemcell.com/cytokines or contact us at techsupport@stemcell.com.

References

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