



6042 Cornerstone Court W, Ste B
San Diego, CA 92121
Tel: 1.858.202.1401
Fax: 1.858.481.8694
Email: info@bpsbioscience.com

Data Sheet
Anti-BCMA-Anti-CD3 Bispecific Antibody
Catalog #:100689
Lot #: 200415 Conc.: 0.9 mg/ml

Host Species: Human

Formulated in: 8 mM phosphate, 110 mM NaCl, 2.2 mM KCl, pH 7.4, and 20% glycerol

Stability: Stable for at least 12 months at -80°C. Avoid freeze/thaw cycles.

Product description: Anti-BCMA-Anti-CD3-Avi-His-Tag is a purified recombinant human bispecific antibody with T cell Engager. This bispecific antibody has been tested for specific activity in both ELISA binding assay to BCMA-biotin and functional reporter assay using NFAT-luc reporter Jurkat cell line (BPS Bioscience #60621) in the presence of BCMA-CHO cells (BPS Bioscience #79500-H).

Purification: Ni-NTA affinity purification of the His-tag protein from HEK293 cells.

Background: B-cell maturation antigen (BCMA), also known as tumor necrosis factor receptor superfamily member 17 (TNFRSF17), is a protein encoded by the TNFRSF17 gene. TNFRSF17 is a cell surface receptor of the TNF receptor superfamily that recognizes B-cell activating factor (BAFF). BCMA is preferentially expressed in mature B lymphocytes and also on Multiple Myeloma (MM) cells. Upregulations of BCMA also correlates with disease burden and prognosis in multiple myeloma. This bispecific antibody binds to BCMA on cancer cells and CD3 on T cells simultaneously, thus bringing T lymphocytes closer to the cancer cells. The binding event potentiates unstimulated T cells and induces direct cytotoxicity against BCMA+ cancer cells.

Application: This product is for research use only. It is not suitable for human diagnostic or therapeutic use. The anti-BCMA-anti-CD3-Avi-His-Tag can be used for studying BCMA+ cancer cell-mediated T cell activation, using either primary T cells or reporter cell lines such as NFAT-luc-Jurkat cells (BPS Bioscience #60621).

OUR PRODUCTS ARE FOR RESEARCH USE ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

To place your order, please contact us by Phone **1.858.202.1401** Fax **1.858.481.8694**
Or you can Email us at: info@bpsbioscience.com
Please visit our website at: www.bpsbioscience.com

Fig. 1: Protein expression and purification of Anti-BCMA-anti-CD3-Avi-His-Tag

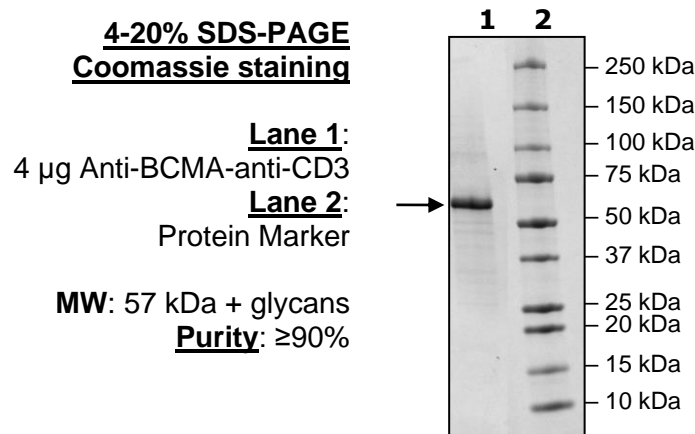
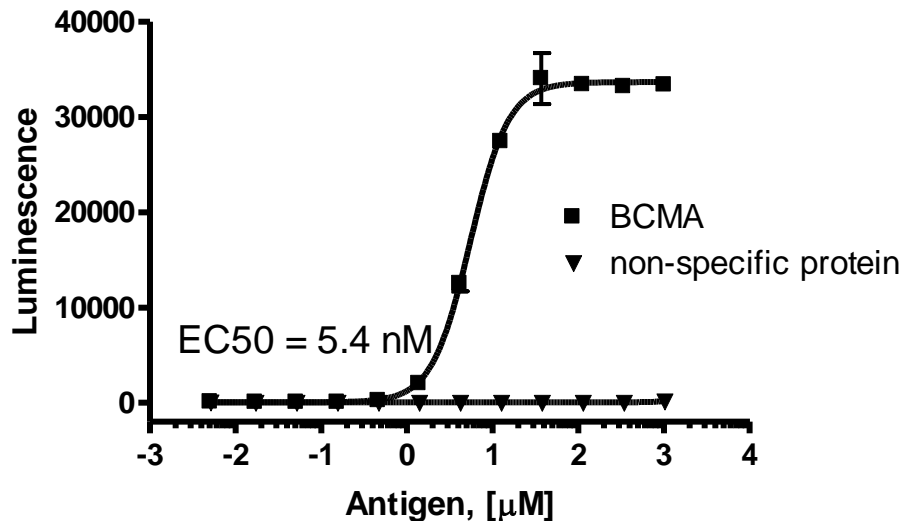


Fig. 2: ELISA assay shows specific binding of anti BCMA-anti CD3 when the ELISA plate is coated with anti BCMA-anti CD3 antibody and exposed to a BCMA Biotin (BPS Bioscience #79467-1) titration.



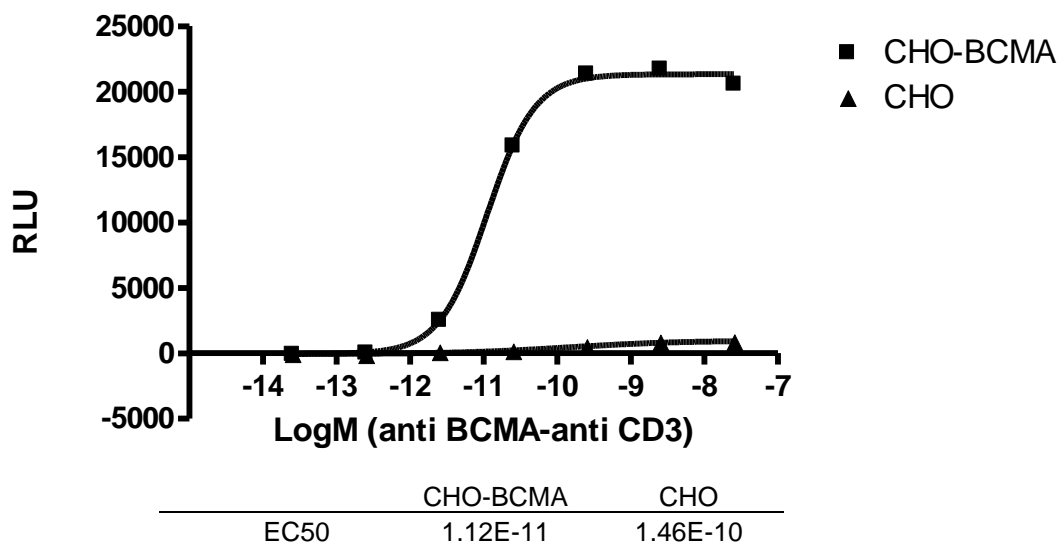
OUR PRODUCTS ARE FOR RESEARCH USE ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

To place your order, please contact us by Phone **1.858.202.1401** Fax **1.858.481.8694**
 Or you can Email us at: info@bpsbioscience.com
 Please visit our website at: www.bpsbioscience.com

Experimental design and assay protocol for measuring anti BCMA-anti CD3 functional activity using NFAT-luc reporter Jurkat cell line:

- (1) Jurkat effector cells with endogenous TCR/CD3 and transfected reporter NFAT-luc (BPS Bioscience #60621) are incubated with increasing concentrations of anti BCMA x anti CD3 bispecific antibody in the presence of BCMA-CHO cells (BPS Bioscience #79500-H) or CHO cells (ATCC #CCL-61™).
- (2) The bispecific antibody simultaneously binds to TCR/CD3 on Jurkat reporter cells and tumor antigen BCMA on BCMA-CHO cells.
- (3) The bispecific antibody interaction stimulates NFAT-luciferase activity and the luciferase activity is measured by ONE-Step™ luciferase assay (BPS Bioscience #60690) per recommended protocol.

Fig. 3: Activation of NFAT Reporter Jurkat cells by anti BCMA-anti CD3 bispecific antibody in the presence of BCMA-CHO cells or CHO cells



Related Products:

Product	Cat. #	Size
NFAT Reporter (Luc) – Jurkat Cell Line	60621	2 vials
BCMA CHO Cell Line (High Expression)	79500-H	2 vials
ONE-Step™ Luciferase Assay System	60690-1	10 ml
BCMA, Fc-fusion (IgG1), Avi-Tag, Biotin-Labeled	79467-1	25 µg
Anti-BCMA Antibody (Single-Chain Variable Fragment)	100173	50 µg
Anti-CD19-Anti-CD3 Bispecific Antibody	100441	50 µg

OUR PRODUCTS ARE FOR RESEARCH USE ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

To place your order, please contact us by Phone **1.858.202.1401** Fax **1.858.481.8694**
 Or you can Email us at: info@bpsbioscience.com
 Please visit our website at: www.bpsbioscience.com