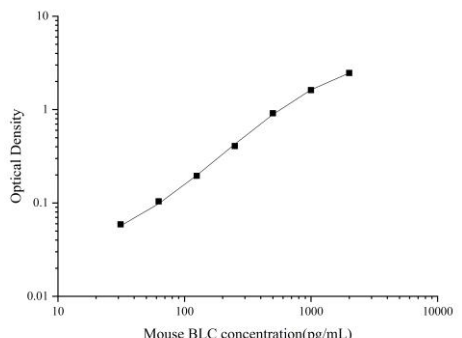


Applications

Mouse BLC Sandwich ELISA Assay:

	Recommended Concentration/Dilution	Reagent	Images																
ELISA Capture	0.5-4µg/mL	Mouse BLC Capture Antibody	 <p>The graph is a log-log plot. The x-axis is labeled 'Mouse BLC concentration(pg/mL)' and ranges from 10 to 10000. The y-axis is labeled 'Optical Density' and ranges from 0.01 to 10. The data points form a straight line with a positive slope, indicating a power-law relationship between concentration and optical density.</p> <table border="1"> <caption>Approximate data points from the standard curve</caption> <thead> <tr> <th>Mouse BLC concentration (pg/mL)</th> <th>Optical Density</th> </tr> </thead> <tbody> <tr> <td>20</td> <td>0.05</td> </tr> <tr> <td>50</td> <td>0.1</td> </tr> <tr> <td>100</td> <td>0.2</td> </tr> <tr> <td>200</td> <td>0.4</td> </tr> <tr> <td>500</td> <td>0.8</td> </tr> <tr> <td>1000</td> <td>1.5</td> </tr> <tr> <td>2000</td> <td>2.5</td> </tr> </tbody> </table>	Mouse BLC concentration (pg/mL)	Optical Density	20	0.05	50	0.1	100	0.2	200	0.4	500	0.8	1000	1.5	2000	2.5
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ELISA Detection	1:1000-1:10000	Mouse BLC Detection Antibody (Biotin)																	

Note: This standard curve is only for demonstration purposes. A standard curve should be generated for each assay!

Background

CXCL13, also known as B-lymphocyte chemoattractant (BLC), is a CXC chemokine that is constitutively expressed in secondary lymphoid organs. Mouse BCA-1 cDNA encodes a precursor protein of 109 amino acid residues with a putative leader sequence of 21 residues. Mature mouse BCA-1 shares 64% amino acid sequence similarity with the human protein and 23-34% amino acid sequence identity with other known CXC chemokines. Recombinant or chemically synthesized BCA-1 is a potent chemoattractant for B lymphocytes but not T lymphocytes, monocytes or neutrophils. BLR1, a G protein-coupled receptor originally isolated from Burkitt's lymphoma cells, has now been shown to be the specific receptor for BCA-1. Among cells of the hematopoietic lineages, the expression of BLR1, now designated CXCR5, is restricted to B lymphocytes and a subpopulation of T helper memory cells. Mice lacking BLR1 have been shown to lack inguinal lymph nodes. These mice were also found to have impaired development of Peyer's patches and defective formation of primary follicles and germinal centers in the spleen as a result of the inability of B lymphocytes to migrate into B cell areas.