

## Human BMP-2 Antibody Pair Set

<b>Catalog No.</b>	E-KAB-0159	<b>Applications</b>	ELISA
<b>Synonyms</b>	BMP2A, BMP-2A, BDA2		

### Kit components & Storage

Title	Specifications	Storage
Human BMP-2 Capture Antibody	1 vial, 100 µg	Store at -20°C for one year. Avoid freeze / thaw cycles.
Human BMP-2 Detection Antibody (Biotin)	1 vial, 50 µL	Store at -20°C for one year. Avoid freeze / thaw cycles.

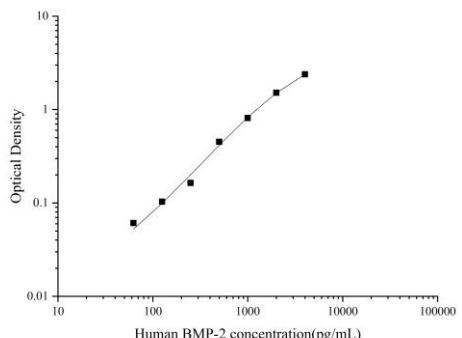
**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

### Product Information

Items		Characteristic (E-KAB-0159)	
		Human BMP-2 Capture Antibody	Human BMP-2 Detection Antibody (Biotin)
Immunogen Information	Immunogen	Recombinant Human BMP-2 protein	Recombinant Human BMP-2 protein
	Swissprot	P12643	
Product details	Reactivity	Human	Human
	Host	Mouse	Mouse
	Conjugation	Unconjugated	Biotin
	Concentration	0.5mg/mL	/
	Buffer	PBS with 0.04% Proclin 300, 50% glycerol, pH 7.4	PBS with 0.04% Proclin 300, 1% protective protein, 50% glycerol, pH 7.4
	Purify	Protein A or G	Protein A or G
	Specificity	Detects Human BMP-2 in ELISAs.	

## Applications

### Human BMP-2 Sandwich ELISA Assay:

	Recommended Concentration/Dilution	Reagent	Images														
ELISA Capture	0.5-4µg/mL	Human BMP-2 Capture Antibody	 <p>The graph is a log-log plot. The y-axis is labeled 'Optical Density' and ranges from 0.01 to 10. The x-axis is labeled 'Human BMP-2 concentration(pg/mL)' and ranges from 10 to 100000. Six data points are plotted, showing a clear upward trend. A smooth curve is drawn through the points.</p> <table border="1"> <caption>Approximate data points from the standard curve</caption> <thead> <tr> <th>Human BMP-2 concentration (pg/mL)</th> <th>Optical Density</th> </tr> </thead> <tbody> <tr> <td>100</td> <td>0.05</td> </tr> <tr> <td>200</td> <td>0.1</td> </tr> <tr> <td>500</td> <td>0.3</td> </tr> <tr> <td>1000</td> <td>0.6</td> </tr> <tr> <td>2000</td> <td>1.2</td> </tr> <tr> <td>5000</td> <td>2.5</td> </tr> </tbody> </table>	Human BMP-2 concentration (pg/mL)	Optical Density	100	0.05	200	0.1	500	0.3	1000	0.6	2000	1.2	5000	2.5
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ELISA Detection	1:1000-1:10000	Human BMP-2 Detection Antibody (Biotin)															

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

## Background

Bone morphogenetic protein-2 (BMP-2) is a member of the transforming growth factor-beta (TGFB) superfamily. BMP2 is synthesized as a 60 kDa precursor that is processed in the secretory pathway to a small 18 kDa monomer; 2 monomers then associate to form the active 30 kDa homodimer, which binds to its receptor. There is also a 40-45 kDa form of BMP2, as an amino-terminal propeptide. BMP2 can induce bone formation and regeneration during early embryonic development. It is involved in the hedgehog pathway, TGF beta signaling pathway, and cytokine-cytokine receptor interaction.