

## Human VIM Antibody Pair Set

Catalog No. E-KAB-0126

Applications

ELISA

Synonyms VIM, FLJ36605

### Kit components & Storage

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

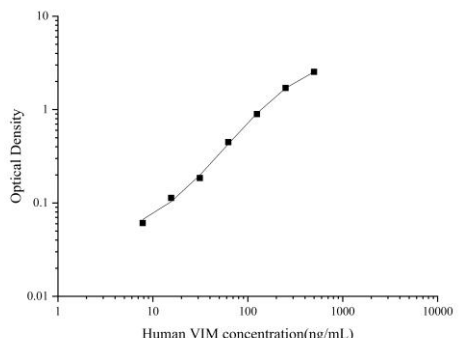
**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

### Product Information

Items		Characteristic (E-KAB-0126)	
		Human VIM Capture Antibody	Human VIM Detection Antibody (Biotin)
Immunogen Information	Immunogen	Recombinant Human VIM protein	Recombinant Human VIM protein
	Swissprot	P08670	
Product details	Reactivity	Human	Human
	Host	Mouse	Goat
	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	Antigen Affinity
	Specificity	Detects Human VIM in ELISAs.	

## Applications

### Human VIM Sandwich ELISA Assay:

	Recommended Concentration/Dilution	Reagent	Images																
ELISA Capture	0.5-4μg/mL	Human VIM Capture Antibody	 <p>The graph is a log-log plot of Optical Density versus Human VIM concentration (ng/mL). The x-axis ranges from 1 to 10,000 ng/mL, and the y-axis ranges from 0.01 to 10. The data points form a straight line, 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>Human VIM concentration (ng/mL)</th> <th>Optical Density</th> </tr> </thead> <tbody> <tr> <td>10</td> <td>0.05</td> </tr> <tr> <td>20</td> <td>0.1</td> </tr> <tr> <td>50</td> <td>0.2</td> </tr> <tr> <td>100</td> <td>0.4</td> </tr> <tr> <td>200</td> <td>0.8</td> </tr> <tr> <td>500</td> <td>1.5</td> </tr> <tr> <td>1000</td> <td>3.0</td> </tr> </tbody> </table>	Human VIM concentration (ng/mL)	Optical Density	10	0.05	20	0.1	50	0.2	100	0.4	200	0.8	500	1.5	1000	3.0
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ELISA Detection	1:1000-1:10000	Human VIM Detection Antibody (Biotin)																	

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

## Background

Vimentin, also named as VIM, belongs to the intermediate filament family. Vimentin is class-III intermediate filaments found in various non-epithelial cells, especially mesenchymal cells. Vimentin is important for stabilizing the architecture of the cytoplasm. Monocyte-derived macrophages secrete vimentin into the extracellular space in vitro. Secretion of vimentin was enhanced by the proinflammatory cytokine tumor necrosis factor- $\alpha$  (TNF $\alpha$ ; 191160) and inhibited by the antiinflammatory cytokine IL10 (124092), suggesting that vimentin is involved in the immune response. Vimentin has specialized functions that contribute to specific dynamic cellular processes. As a phosphoprotein, 55-60 kDa of vimentin proteins can be observed due to the different phosphorylation level.