

## Human GDNF Antibody Pair Set

<b>Catalog No.</b>	E-KAB-0134	<b>Applications</b>	ELISA
<b>Synonyms</b>	ATF, ATF1, ATF2, HFB1-GDNF, HSCR3		

### Kit components & Storage

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

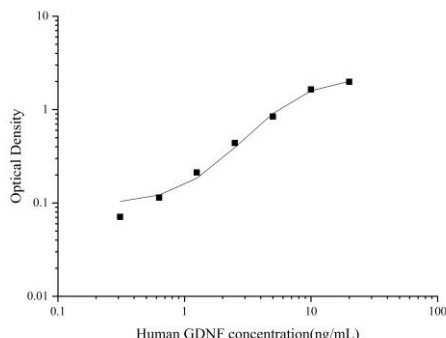
**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

### Product Information

Items		Characteristic (E-KAB-0134)	
		Human GDNF Capture Antibody	Human GDNF Detection Antibody (Biotin)
Immunogen Information	Immunogen	Recombinant Human GDNF protein	Recombinant Human GDNF protein
	Swissprot	P39905	
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 GDNF in ELISAs.	

## Applications

### Human GDNF Sandwich ELISA Assay:

	Recommended Concentration/Dilution	Reagent	Images																				
ELISA Capture	0.5-4µg/mL	Human GDNF Capture Antibody	 <p>The graph displays a standard curve for the Human GDNF Sandwich ELISA Assay. The x-axis represents Human GDNF concentration in ng/mL on a logarithmic scale from 0.1 to 100. The y-axis represents Optical Density on a logarithmic scale from 0.01 to 10. The data points show a clear upward trend, indicating that as the concentration of Human GDNF increases, the optical density also increases.</p> <table border="1"> <caption>Approximate data points from the standard curve</caption> <thead> <tr> <th>Human GDNF concentration (ng/mL)</th> <th>Optical Density</th> </tr> </thead> <tbody> <tr> <td>0.1</td> <td>0.05</td> </tr> <tr> <td>0.2</td> <td>0.1</td> </tr> <tr> <td>0.5</td> <td>0.2</td> </tr> <tr> <td>1</td> <td>0.4</td> </tr> <tr> <td>2</td> <td>0.8</td> </tr> <tr> <td>5</td> <td>1.5</td> </tr> <tr> <td>10</td> <td>2.5</td> </tr> <tr> <td>20</td> <td>4.0</td> </tr> <tr> <td>50</td> <td>6.0</td> </tr> </tbody> </table>	Human GDNF concentration (ng/mL)	Optical Density	0.1	0.05	0.2	0.1	0.5	0.2	1	0.4	2	0.8	5	1.5	10	2.5	20	4.0	50	6.0
Human GDNF concentration (ng/mL)	Optical Density																						
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ELISA Detection	1:1000-1:10000	Human GDNF Detection Antibody (Biotin)																					

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

## Background

This gene encodes a secreted ligand of the TGF-beta (transforming growth factor-beta) superfamily of proteins. Ligands of this family bind various TGF-beta receptors leading to recruitment and activation of SMAD family transcription factors that regulate gene expression. The encoded preproprotein is proteolytically processed to generate each subunit of the disulfide-linked homodimer. The recombinant form of this protein, a highly conserved neurotrophic factor, was shown to promote the survival and differentiation of dopaminergic neurons in culture, and was able to prevent apoptosis of motor neurons induced by axotomy. This protein is a ligand for the product of the RET (rearranged during transfection) protooncogene. Mutations in this gene may be associated with Hirschsprung disease and Tourette syndrome. This gene encodes multiple protein isoforms that may undergo similar proteolytic processing.