

Human glial cell line-derived neurotrophic factor (GDNF) ELISA Kit | GDNF elisa kit

Human glial cell line-derived neurotrophic factor, GDNF ELISA Kit

CATALOG #
AAA80293

REACTIVITY
Human

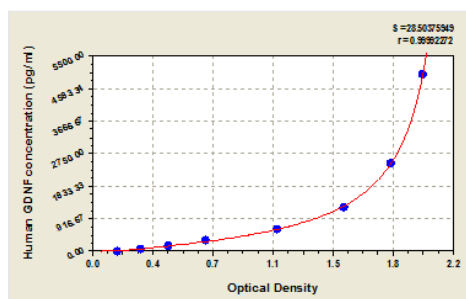
PRODUCT SYNONYMS

glial cell line-derived neurotrophic factor (GDNF); Human glial cell line-derived neurotrophic factor; GDNF ELISA Kit; Human glial cell line-derived neurotrophic factor (GDNF) ELISA kit; ATF1; ATF2; HFB1-GDNF; astrocyte-derived trophic factor; glial cell line derived neurotrophic factor; GDNF elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Human
Specificity	This assay has high sensitivity and excellent specificity for detection of Human GDNF. No significant cross-reactivity or interference between Human GDNF and analogues was observed.
Sequence Length	211
Samples	Serum, plasma, tissue homogenates
Detection Range	78 pg/ml-5000 pg/ml
Sensitivity	19.5 pg/ml
Intra-assay Precision	Intra-assay Precision (Precision within an assay): CV% is less than 8% Three samples of known concentration were tested twenty times on one plate to assess. Inter-assay Precision (Precision between assays): CV% is less than 10% Three samples of known concentration were tested in twenty assays to assess.
Detection Wavelength	450 nm
Sample Volume	50-100ul
Preparation and Storage	Unopened test kits should be stored at 2 to 8 degree C upon receipt. Please refer to pdf manual for further storage instructions.

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for GDNF elisa kit

Introduction: Glial Cell Line-derived Neurotrophic Factor (GDNF) is a recently discovered neurotrophic factor that has been shown to promote the survival of various neuronal subpopulations in both the central as well as the peripheral nervous systems at different stages of their development. Neuronal subpopulations that have been shown to be affected by GDNF include motoneurons, midbrain dopaminergic neurons, Purkinje cells and sympathetic neurons. Native GDNF, a disulfide-linked homodimeric glycoprotein, is a novel member of the TGF-superfamily. In humans, GDNF is encoded by the GDNF gene. This gene encodes a highly conserved neurotrophic factor. The recombinant form of this protein 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. The encoded protein is processed to a mature secreted form that exists as a homodimer. The mature form of the protein is a ligand for the product of the RET (rearranged during transfection) protooncogene. In addition to the transcript encoding GDNF, two additional alternative transcripts encoding distinct proteins, referred to as astrocyte-derived trophic factors, have also been described. Mutations in this gene may be associated with Hirschprung disease. The most prominent feature of GDNF is its ability to support the survival of dopaminergic and motoneurons. These neuronal populations die in the course of Parkinson's disease and amyotrophic lateral sclerosis (ALS) respectively. GDNF also regulates kidney development and spermatogenesis, and it affects alcohol consumption.

Principle of the Assay: The microtiter plate provided in this kit has been pre-coated with an antibody specific to GDNF. Standards or samples are then added to the appropriate microtiter plate wells with a biotin conjugated antibody preparation specific for GDNF and Avidin conjugated to Horseradish Peroxidase (HRP) is added to each microplate well and incubated. Then a TMB (3,3',5,5' tetramethyl-benzidine) substrate solution is added to each well. Only those wells that contain GDNF, biotin-conjugated antibody and enzyme-conjugated Avidin will exhibit a change in color. The enzyme-substrate reaction is terminated by the addition of a sulphuric acid solution and the color change is measured spectrophotometrically at a wavelength of 450 nm +/- 2 nm. The concentration of GDNF in the samples is then determined by comparing the O.D. of the samples to the standard curve.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4503975
NCBI GeneID	2668
NCBI Accession #	NP_000505.1
NCBI GenBank Nucleotide #	NM_000514.3
UniProt Accession #	P39905; O95448; O95449; O95986; Q6FH33; Q96L44; Q9UD32; Q9UD33; Q9UMV2; Q9UP67; Q9UP97; B7WPK7 ; AAB33493; AAB33494
Molecular Weight	23,720 Da
NCBI Official Full Name	glial cell line-derived neurotrophic factor isoform 1 preproprotein
NCBI Official Synonym Full Names	glial cell derived neurotrophic factor
NCBI Official Symbol	GDNF
NCBI Official Synonym Symbols	ATF1; ATF2; HSCR3; HFB1-GDNF
NCBI Protein Information	glial cell line-derived neurotrophic factor; ATF; astrocyte-derived trophic factor
UniProt Protein Name	Glial cell line-derived neurotrophic factor
UniProt Gene Name	GDNF
UniProt Synonym Gene Names	hGDNF; ATF
UniProt Entry Name	GDNF_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/human-elisa-kits/glial-cell-line-derived-neurotrophic-factor-gdnf/80293>