# abcam

# Product datasheet

# Human GDNF ELISA Kit (Glial Derived Neurotrophic Factor) ab100525

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#### Overview

Product name Human GDNF ELISA Kit (Glial Derived Neurotrophic Factor)

**Detection method**Colorimetric

Sample type Cell culture supernatant, Plasma

Assay type Sandwich (quantitative)

Sensitivity < 4 pg/ml

**Range** 2.74 pg/ml - 2000 pg/ml

Recovery 100 %

Sample specific recovery

Sample type	Average %	Range
Cell culture supernatant	119.8	85% - 140%
Plasma	99.25	86% - 113%

Assay duration Multiple steps standard assay

Species reactivity Reacts with: Human

Product overview Abcam's GDNF (Glial Derived Neurotrophic Factor) Human ELISA (Enzyme-Linked

Immunosorbent Assay) kit is an  $in\ vitro$  enzyme linked immunosorbent assay for the quantitative measurement of Human GDNF in plasma and cell culture supernatants. (Human GDNF

concentration is pretty low in normal plasma, it may not be detected in this assay).

This assay employs an antibody specific for Human GDNF coated on a 96-well plate. Standards and samples are pipetted into the wells and GDNF present in a sample is bound to the wells by the immobilized antibody. The wells are washed and biotinylated anti-Human GDNF antibody is added. After washing away unbound biotinylated antibody, HRP-conjugated streptavidin is pipetted to the wells. The wells are again washed, a TMB substrate solution is added to the wells and color develops in proportion to the amount of GDNF bound. The Stop Solution changes the color from blue to yellow, and the intensity of the color is measured at 450 nm.

We have not been able to detect the endogenous Human GDNF in normal serum with ab100525, only in serum spiked with Human GDNF.

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**Notes** Optimization may be required with urine samples

**Platform** Microplate

#### **Properties**

## Storage instructions

Store at -20°C. Please refer to protocols.

Components	1 x 96 tests
20X Wash Buffer	1 x 25ml
400X HRP-Streptavidin Concentrate	1 x 200µl
5X Assay Diluent B	1 x 15ml
Assay Diluent A	1 x 30ml
Biotinylated anti-Human GDNF	2 vials
GDNF Microplate (12 x 8 wells)	1 unit
Recombinant Human GDNF Standard (lyophilized)	2 vials
Stop Solution	1 x 8ml
TMB One-Step Substrate Reagent	1 x 12ml

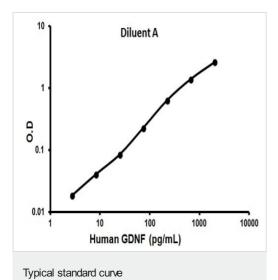
#### Relevance

Glial cell line derived neurotrophic factor (GDNF) is a highly conserved neurotrophic factor that is a distant member of the TGF beta superfamily. The GDNF gene product is processed to a disulphide-linked homodimer, which is a ligand for the RET protooncogene. GDNF protects and repairs dopamine-containing neurons, which degenerate in Parkinson's disease, and motor neurons, which die in amyotrophic lateral sclerosis. The use of GDNF in the treatment of Parkinson's disease has shown promise in the clinic. Treatment of spinal cord injuries with GDNF has also produced neurological improvement.

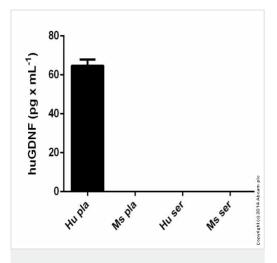
#### Cellular localization

Secreted

#### **Images**

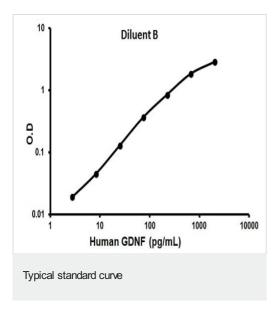


Representative standard curve using ab100525



HuGDNF measured in biological fluids showing quantity (pg) per mL of tested sample

ab100525 GDNF (Glial Derived Neurotrophic Factor) Human ELISA Kit



Representative standard curve using ab100525

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