

Rat neurotrophin 3 ELISA Kit | NTF3 elisa kit

Rat Neurotrophin 3, NT-3 ELISA Kit

CATALOG #
AAA80060

REACTIVITY
Rat

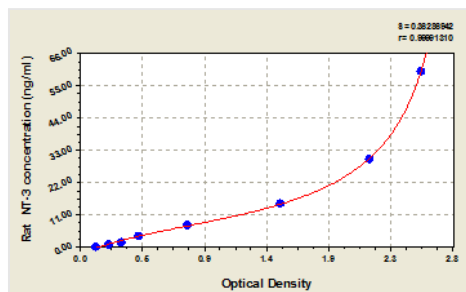
PRODUCT SYNONYMS

neurotrophin 3; Rat Neurotrophin 3; NT-3 ELISA Kit; NT-3 ELISA KIT; HDNF; MGC129711; NGF-2; NGF2; NT3; ; NTF3 elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Rat
Specificity	This assay has high sensitivity and excellent specificity for detection of Rat NTF3. No significant cross-reactivity or interference between Rat NTF3 and analogues was observed.
Sequence Length	271
Samples	Serum, plasma, tissue homogenates
Detection Range	0.9ng/ml-60ng/ml
Sensitivity	0.225 ng/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 NTF3 elisa kit

Introduction: Neurotrophin-3, or NT-3 is a neurotrophic factor, in the NGF (Nerve Growth Factor)-family of neurotrophins. It is a protein growth factor which has activity on certain neurons of the peripheral and central nervous system; it helps to support the survival and differentiation of existing neurons, and encourages the growth and differentiation of new neurons and synapses. NT-3 was the third neurotrophic factor to be characterized, after nerve growth factor (NGF) and BDNF (Brain Derived Neurotrophic Factor). Although the vast majority of neurons in the mammalian brain are formed prenatally, parts of the adult brain retain the ability to grow new neurons from neural stem cells; a process known as neurogenesis. Neurotrophins are chemicals that help to stimulate and control neurogenesis. NT-3 is unique in the number of neurons it can potentially stimulate, given its ability to activate two of the receptor tyrosine kinase neurotrophin receptors (TrkC and TrkB - see below). Mice born without the ability to make NT-3 have loss of proprioceptive and subsets of mechanoreceptive sensory neurons. NT-3 binds three receptors on the surface of cells which are capable of responding to this growth factor: TrkC (pronounced "Track C"), is apparently the "physiologic" receptor, in that it binds with greatest affinity to NT-3. However, NT-3 is capable of binding and signaling through a TrkC-related receptors called TrkB. Finally, NT-3 also binds a second-receptor type besides Trk receptors, called the LNGFR (for "low affinity nerve growth factor receptor").

Principle of the Assay: The microtiter plate provided in this kit has been pre-coated with an antibody specific to NT-3. Standards or samples are then added to the appropriate microtiter plate wells with a biotin-conjugated antibody preparation specific for NT-3 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 NT-3, 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 NT-3 in the samples is then determined by 4 comparing the O.D. of the samples to the standard curve.

NCBI AND UNIPROT INFORMATION

NCBI GI #	399498552
NCBI GeneID	81737
NCBI Accession #	NP_001257797.1
NCBI GenBank Nucleotide #	NM_001270868.1
UniProt Accession #	P18280 ; Q6NS33
Molecular Weight	29,645 Da
NCBI Official Full Name	neurotrophin-3 isoform 2
NCBI Official Synonym Full Names	neurotrophin 3
NCBI Official Symbol	Ntf3
NCBI Protein Information	neurotrophin-3; HDNF; NT-3; NGF-2; neurotrophic factor; nerve growth factor 2; neurotrophin-3 (HDNF/NT-3)
UniProt Protein Name	Neurotrophin-3
UniProt Gene Name	Ntf3
UniProt Synonym Gene Names	Ntf-3; NT-3; NGF-2
UniProt Entry Name	NTF3_RAT

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.