

## Human Tau-tubulin kinase 2 (TTBK2) ELISA Kit

Catalog No: #EK5980



Package Size: #EK5980-1 48T #EK5980-2 96T

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

## Description

Product Name	Human Tau-tubulin kinase 2 (TTBK2) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Human (Homo sapiens)
Other Names	KIAA0847; SCA11; TTBK; spinocerebellar ataxia 11
Accession No.	Q6IQ55
Uniprot	Q6IQ55
GeneID	146057;
Storage	<p>The stability of ELISA kit is determined by the loss rate of activity. The loss rate of this kit is less than 5% within the expiration date under appropriate storage condition.</p> <p>The loss rate was determined by accelerated thermal degradation test. Keep the kit at 37C for 4 and 7 days, and compare O.D.values of the kit kept at 37C with that of at recommended temperature. (referring from China Biological Products Standard, which was calculated by the Arrhenius equation. For ELISA kit, 4 days storage at 37C can be considered as 6 months at 2 - 8C, which means 7 days at 37C equaling 12 months at 2 - 8C).</p>

## Application Details

Detect Range:0.312-20 ng/mL

Sensitivity:0.124 ng/mL

Sample Type:Serum, Plasma, Other biological fluids

Sample Volume: 1-200 µL

Assay Time:1-4.5h

Detection wavelength:450 nm

## Product Description

**Detection Method:**SandwichTest principle:This assay employs a two-site sandwich ELISA to quantitate TTBK2 in samples. An antibody specific for TTBK2 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyTTBK2 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for TTBK2 is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of TTBK2 bound in the initial step. The color development is stopped and the intensity of the color is measured.**Product Overview:**TTBK2 produces a 5.6-kb transcript in which the longest open reading frame is 3,732 nucleotides, encoding a protein of 1,244 amino acids. The gene is alternatively spliced, with ubiquitous expression in human adult and fetal tissues. The N-terminus of TTBK2 encodes a serine-threonine-tyrosine kinase domain, and a C-terminal region shows homology to TTBK1. TTBK2 was expressed in all brain regions in human, rat, and mouse tissue. There was particularly high expression in Purkinje cells of the cerebellum, granular cell layer, hippocampus, midbrain, and substantia nigra. Lower expression was seen in the cortex of human, rat, and mouse brains.<sup>2</sup> TTBK2 phosphorylation sites in tau (ser208 and ser210) are priming sites for the phosphorylation of tau by GSK-3-beta, which influences tau pathology.

---

Note: This product is for in vitro research use only