

## Rat Dynorphin (DYN) ELISA Kit

Catalog No: #EK10519



Package Size: #EK10519-1 48T #EK10519-2 96T

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## Description

Product Name	Rat Dynorphin (DYN) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Rat ( <i>Rattus norvegicus</i> )
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:3.70-300 pg/mL

Sensitivity:1.42 pg/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 DYN in samples. An antibody specific for DYN has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyDYN present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for DYN 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 DYN bound in the initial step. The color development is stopped and the intensity of the color is measured.

**Product Overview:**Big dynorphin (Big Dyn), a 32-amino acid prodynorphin-derived peptide consisting of Dyn A and Dyn B, with human KOR, mu- (hMOR) and delta- (hDOR) opioid receptors and opioid receptor-like receptor 1 (hORL1) expressed in cells transfected with respective cDNA. Big Dyn and Dyn A demonstrated roughly similar affinity for binding to hKOR that was higher than that of Dyn B. Big Dyn activated G proteins through KOR with much greater potency, efficacy and selectivity than other dynorphins. Immunoreactive Big Dyn was detected using the combination of radioimmunoassay (RIA) and HPLC in the human nucleus accumbens, caudate nucleus, hippocampus and cerebrospinal fluid (CSF) with the ratio of Big Dyn and Dyn B being approximately 1:3. The presence in the brain implies that Big Dyn, along with other dynorphins, is processed from prodynorphin and secreted from neurons.

Note: This product is for in vitro research use only