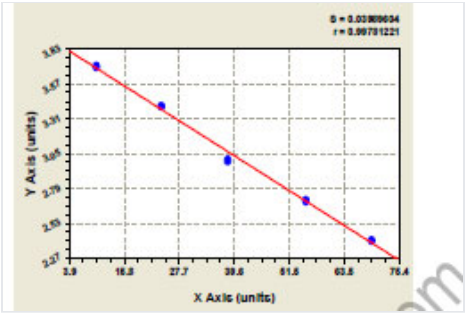
Proenkephalin-B (PDYN) ELISA Kit for Mouse

PRODUCT OVERVIEW

Product Name	Proenkephalin-B (PDYN), ELISA Kit
Full Product Name	Mouse Proenkephalin-B (PDYN) ELISA Kit
Product Gene Name	PDYN elisa kit
Species Reactivity	Mouse
Assay Type	Competitive
Samples	Serum, plasma, Cell Culture Supernatants, body fluid and tissue homogenate
Detection Range	50-1000pg/mL
Sensitivity	1.0pg/mL
Preparation and Storage	Store all reagents at 2-8 degree C.
Molecular Weight	28,385 Da
OMIM	gene 610245
Sample Preparation	We suggest pre-experimenting with neat (undiluted) samples, 1:2 or 1:4 dilutions. Please avoid diluting your samples more than 1:10 as it would exceed the dilution limit set for this kit. If the expected concentration of the target is beyond the detection range of the kit, please contact our technical support team
Product Categories/Family for PDYN elisa kit	Neuroscience
ISO Certification	Manufactured in an ISO 13485:2016 Certified Laboratory.
Related Product Information for PDYN elisa kit	Intended Uses: This PDYN ELISA kit is a 1.5 hour solid-phase ELISA designed for the quantitative determination of Mouse PDYN. Principle of the Assay: PDYN ELISA kit applies the competitive enzyme immunoassay technique utilizing a polyclonal anti-PDYN antibody and an PDYN-HRP conjugate. The assay sample and buffer are incubated together with PDYN-HRP conjugate in pre-coated plate for one hour. After the incubation period, the wells are decanted and washed five times. The wells are then incubated with a substrate for HRP enzyme. The product of the enzyme-substrate reaction forms a blue colored complex. Finally, a stop solution is added to stop the reaction, which will then turn the solution yellow. The intensity of color is measured spectrophotometrically at 450nm in a microplate reader. The intensity of the color is inversely proportional to the PDYN concentration since PDYN from samples and PDYN-HRP conjugate compete for the anti-PDYN antibody binding site. Since the number of sites is limited, as more sites are occupied by PDYN from the sample, fewer sites are left to bind PDYN-HRP conjugate. A standard curve is plotted relating the intensity of the color (O.D.) to the concentration of standards. The PDYN concentration in each sample is interpolated from this standard curve.
Other Notes	Small volumes of PDYN elisa kit vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for PDYN purchase	MBS7232567 is a ready-to-use microwell, strip plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the Proenkephalin-B (PDYN) ELISA Kit target analytes in biological samples. The concentration gradients of the kit standards or positive controls render a theoretical kit detection range in biological research samples containing PDYN. The ELISA analytical biochemical technique of the MBS7232567 kit is based on PDYN antibody-PDYN antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect PDYN antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, PDYN. Appropriate sample types may include undiluted body fluids and/or tissue homogenates, secretions. Quality control assays assessing reproducibility identified the intra-assay CV (%) and inter-assay CV(%).



Typical Testing Data/Standard Curve (for reference only) of PDYN elisa kit

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for PDYN. It may not necessarily be applicable to this product.

NCBI GI #	300116234
NCBI GeneID	5173
NCBI Accession #	NP_001177829.1
UniProt Secondary Accession #	A8K0Q3
UniProt Related Accession #	P01213
GenBank Nucleotide #	NM_001190900.1
NCBI Official Full Name	proenkephalin-B preproprotein
NCBI Official Synonym Full Names	prodynorphin
NCBI Official Symbol	PDYN
NCBI Official Synonym Symbols	ADCA; PENKB; SCA23
UniProt Protein Name	Proenkephalin-B
UniProt Synonym Protein Names	Beta-neoendorphin-dynorphin; PreprodynorphinCleaved into the following 9 chains:Alpha-neoendorphin; Beta-neoendorphin; Big dynorphin; Big Dyn; Dynorphin A(1-17); Dyn-A17; Dynorphin A; Dynorphin A(1-13); Dynorphin A(1-8); Leu-enkephalin; RimorphinAlternative name(s):Dynorphin B; Dyn-B; Dynorphin B(1-13)
Protein Family	Proenkephalin
UniProt Gene Name	PDYN
UniProt Synonym Gene Names	Big Dyn; Dyn-A17; Dynorphin A; Dyn-B
UniProt Entry Name	PDYN_HUMAN
NCBI Protein Information	proenkephalin-B; rimorphin; leumorphin; leu-enkephalin; preprodynorphin; preproenkephalin B; beta-neoendorphin-dynorphin; neoendorphin-dynorphin-enkephalin prepropeptide
NCBI Summary for PDYN	The protein encoded by this gene is a preproprotein that is proteolytically processed to form the secreted opioid peptides beta-neoendorphin, dynorphin, leu-enkephalin, rimorphin, and leumorphin. These peptides are ligands for the kappa-type of opioid receptor. Dynorphin is involved in modulating responses to several psychoactive substances, including cocaine. Multiple alternatively spliced transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Jul 2010]

UniProt Comments for PDYN	PDYN: Leu-enkephalins compete with and mimic the effects of opiate drugs. They play a role in a number of physiologic functions, including pain perception and responses to stress. Defects in PDYN are the cause of spinocerebellar ataxia type 23 (SCA23). Spinocerebellar ataxia is a clinically and genetically heterogeneous group of cerebellar disorders. Patients show progressive incoordination of gait and often poor coordination of hands, speech and eye movements, due to degeneration of the cerebellum with variable involvement of the brainstem and spinal cord. SCA23 is an adult-onset autosomal dominant form characterized by slowly progressive gait and limb ataxia, with variable additional features, including peripheral neuropathy and dysarthria. Belongs to the opioid neuropeptide precursor family. Protein type: Secreted; Secreted, signal peptide Chromosomal Location of Human Ortholog: 20p13 Cellular Component: plasma membrane; extracellular region Molecular Function: opioid peptide activity Biological Process: synaptic transmission; neuropeptide signaling pathway Disease: Spinocerebellar Ataxia 23
Research Articles on PDYN	**1.** This study demonistratedn that Neurocognitive and neuroinflammatory correlates of PDYN mRNA expression in the anterior cingulate in postmortem brain of HIV-infected subjects.
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