C-Type Natriuretic (CNP) ELISA Kit for Fish

PRODUCT OVERVIEW

Product Name	C-Type Natriuretic Peptide (CNP), ELISA Kit
Full Product Name	Fish C-Type Natriuretic Peptide ELISA Kit
Product Gene Name	CNP elisa kit
Species Reactivity	Fish
Assay Type	Quantitative Sandwich
Samples	undiluted original Fish body fluids, tissue homogenates, secretions or feces samples
Detection Range	15.6 pg/ml - 500 pg/mL
Sensitivity	2.0 pg/mL
Specificity	No significant cross-reactivity or interference between this analyte and analogues is observed.
Preparation and Storage	Store all reagents at 2-8 degree C
Inter-assay Precision	Inter-assay CV (%) is less than 15%. [CV(%) = SD/mean ×100].
Intra-assay Precision	Intra-assay CV (%) is less than 15%.
Molecular Weight	13,246 Da
Chromosome Location	Chromosome: 2; NC_000002.11 (232786805..232791038, complement). Location: 2q24-qter
OMIM	600296
3D Structure	ModBase 3D Structure for P23582
Related Product Information for CNP elisa kit	Background: This Quantitative Sandwich ELISA kit is only for in vitro research use only! This kit is intended to be used for determination the level of CNP (hereafter termed "analyte") in undiluted original Fish body fluids, tissue homogenates, secretions or feces samples. This kit is NOT suitable for assaying non-biological sources of substances.
Other Notes	Small volumes of CNP 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 CNP purchase	MBS037980 is a ready-to-use microwell, strip plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the C-Type Natriuretic Peptide (CNP) 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 CNP. The ELISA analytical biochemical technique of the MBS037980 kit is based on CNP antibody-CNP antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect CNP antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, CNP. 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(%).

ADDITIONAL DETAILS

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

NCBI GI #	13249346
NCBI GeneID	4880
NCBI Accession #	NP_077720.1

UniProt Primary Accession #	P23582
UniProt Secondary Accession #	Q4ZG41
UniProt Related Accession #	P23582
GenBank Nucleotide #	NM_024409.2
NCBI Official Full Name	C-type natriuretic peptide
NCBI Official Synonym Full Names	natriuretic peptide C
NCBI Official Symbol	NPPC
NCBI Official Synonym Symbols	CNP; CNP2
UniProt Protein Name	C-type natriuretic peptide
Protein Family	2',3'-cyclic-nucleotide 3'-phosphodiesterase
UniProt Gene Name	NPPC
UniProt Synonym Gene Names	CNP2
UniProt Entry Name	ANFC_HUMAN
NCBI Protein Information	C-type natriuretic peptide; natriuretic peptide precursor C
NCBI Summary for CNP	The protein encoded by this gene is proteolytically processed to form a secreted hormone of the natriuretic peptide family. The encoded hormone regulates the growth and differentiation of cartilaginous growth plate chondrocytes and may also be vasoactive and natriuretic. [provided by RefSeq, Sep 2011]
UniProt Comments for CNP	NPPC: Hormone which plays a role in endochondral ossification through regulation of cartilaginous growth plate chondrocytes proliferation and differentiation. May also be vasoactive and natriuretic. Specifically binds and stimulates the cGMP production of the NPR2 receptor. Binds the clearance receptor NPR3. Belongs to the natriuretic peptide family. Protein type: Secreted; Secreted, signal peptide; Hormone Chromosomal Location of Human Ortholog: 2q37.1 Cellular Component: extracellular space; secretory granule Molecular Function: protein homodimerization activity; peptide hormone receptor binding; hormone activity; receptor binding Biological Process: response to drug; cGMP biosynthetic process; ossification; regulation of smooth muscle cell proliferation; regulation of cAMP metabolic process; regulation of multicellular organism growth; negative regulation of meiotic cell cycle; negative regulation of DNA metabolic process; positive regulation of vasodilation; post-embryonic development; positive regulation of osteoblast differentiation; negative regulation of cell proliferation; response to ethanol; positive regulation of cGMP biosynthetic process; receptor guanylyl cyclase signaling pathway; response to hypoxia; regulation of cGMP metabolic process; regulation of blood vessel size
Research Articles on CNP	**1.** CNP synthesis (as measured by NTproCNP levels in plasma) is closely related to linear growth in healthy children at all ages. We propose NTproCNP as a biomarker of linear growth.
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Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

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