Caspase 4 (CASPASE-4) ELISA Kit for Canine

PRODUCT OVERVIEW

Product Name	Caspase 4 (CASPASE-4), ELISA Kit
Full Product Name	Canine Caspase 4 ELISA Kit
Product Gene Name	CASPASE-4 elisa kit
Species Reactivity	Canine
Assay Type	Sandwich
Preparation and Storage	Store all reagents at 2-8 degree C
Molecular Weight	43,262 Da
Chromosome Location	Chromosome: 11; NC_000011.9 (104813594..104839325, complement). Location: 11q22.2-q22.3
OMIM	602664
3D Structure	ModBase 3D Structure for P49662
Related Product Information for CASPASE-4 elisa kit	MBS018674 is a ready-to-use microwell, strip plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the Caspase 4 (CASPASE-4) 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 CASPASE-4. The ELISA analytical biochemical technique of the MBS018674 kit is based on CASPASE-4 antibody-CASPASE-4 antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect CASPASE-4 antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, CASPASE-4. 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(%).
Other Notes	Small volumes of CASPASE-4 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.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for CASPASE-4. It may not necessarily be applicable to this product.

NCBI GI #	15451910
NCBI GeneID	837
NCBI Accession #	NP_150649.1
UniProt Primary Accession #	P49662
UniProt Secondary Accession #	A2NHL8; A2NHM0
UniProt Related Accession #	P49662
GenBank Nucleotide #	NM_033306.2
NCBI Official Full Name	caspase-4 isoform gamma
NCBI Official Synonym Full Names	caspase 4, apoptosis-related cysteine peptidase
NCBI Official Symbol	CASP4
NCBI Official Synonym Symbols	TX; ICH-2; Mih1/TX; ICEREL-II; ICE(rel)II
UniProt Protein Name	Caspase-4

UniProt Synonym Protein Names	ICE(rel)-II; Protease ICH-2; Protease TX
Protein Family	Caspase
UniProt Gene Name	CASP4
UniProt Synonym Gene Names	ICH2; CASP-4
UniProt Entry Name	CASP4_HUMAN
NCBI Protein Information	caspase-4; CASP-4; ICE(rel)-II; protease TX; protease ICH-2; apoptotic cysteine protease Mih1/TX; caspase 4, apoptosis-related cysteine protease
NCBI Summary for CASPASE-4	This gene encodes a protein that is a member of the cysteine-aspartic acid protease (caspase) family. Sequential activation of caspases plays a central role in the execution-phase of cell apoptosis. Caspases exist as inactive proenzymes composed of a prodomain and a large and small protease subunit. Activation of caspases requires proteolytic processing at conserved internal aspartic residues to generate a heterodimeric enzyme consisting of the large and small subunits. This caspase is able to cleave and activate its own precursor protein, as well as caspase 1 precursor. When overexpressed, this gene induces cell apoptosis. Alternative splicing results in transcript variants encoding distinct isoforms. [provided by RefSeq, Jul 2008]
UniProt Comments for CASPASE-4	CASP4: Involved in the activation cascade of caspases responsible for apoptosis execution. Cleaves caspase-1. Heterotetramer that consists of two anti-parallel arranged heterodimers, each one formed by a small and a large subunit. Widely expressed, with highest levels in spleen and lung. Moderate expression in heart and liver, low expression in skeletal muscle, kidney and testis. Not found in the brain. Belongs to the peptidase C14A family. 2 isoforms of the human protein are produced by alternative splicing. Protein type: EC 3.4.22.64; Protease; Apoptosis Chromosomal Location of Human Ortholog: 11q22.2-q22.3 Cellular Component: endoplasmic reticulum membrane; mitochondrion; cytoplasm Molecular Function: cysteine-type endopeptidase activity Biological Process: regulation of apoptosis; apoptosis; regulation of inflammatory response; proteolysis
Research Articles on CASPASE-4	**1.** Loss of heterozygosity contributes to tumor progression of oral squamous cell carcinoma, and a specific role for PDCD4, CTNNB1, and CASP4 was found.
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