Human Caspase-2, Tag Free Protein

HA211666

Product name:	Human Caspase-2, Tag Free
Species reactivity:	Human
Protein construction description:	A DNA sequence encoding the human Caspase-2 protein (P42575-1) (Gly 170-Thr 452) was expressed with tag free. As a result of proteolytic cleavage, the apparent molecular mass of the protein is approximately 18 & 12 kDa ,corresponding to the N-terminal P18 subunit and the C-terminal p12 or p13 subunit respectively in SDS-PAGE under reducing conditions.
Background:	Caspase-2 (Nedd2, ICH-1) is an aspartate-specific cysteine protease that is activated in response to various apoptotic stimuli. Caspase-2 is unique among the caspases in that it has features of both upstream caspases (long prodomain) and downstream caspases (DEXD substrate specificity). Caspase-2 is highly expressed in the brain during development, and is expressed at low levels in adult tissue. Specifically, caspase-2 localizes to the mitochondria, the Golgi, the cytoplasm, and the nucleus. Caspase-2 exists as two isoforms, caspase-2L and caspase-2S, which are produced by alternative splicing and differ in their N and C-termini. Caspase-2L acts as a positive regulator of apoptosis, whereas caspase-2S functions as a negative regulator of apoptosis. Following apoptotic stimuli, the caspase-2L precursor undergoes cleavage at Asp-153 to produce a fragment (p30). The p30 fragment undergoes further cleavage to generate a fragment containing amino acids 153-308 (p18) and a fragment containing amino acids 317-435 (p13 or p14). As apoptosis progresses, the p13 (p14) fragment can undergo further processing to yield a fragment containing amino acids 331-435 (p12).
Purity:	>95% as determined by SDS-PAGE.
Endotoxin:	Less than 1.0 EU per μg by the LAL method.
Fragment region:	Caspase-2 (170-452)
Source:	E.coli
Accession:	P42575-1
Predicted molecular mass:	32.4 kD
Formulation:	Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4, 5% Trehalose, 5% mannitol.
Reconstitution:	Reconstitute at 250 μg/ml in sterile water.
Storage:	Please avoid repeated freeze-thaw cycles. Samples are stable for up to twelve months from date of receipt at -20℃ to -80℃ It is recommended that aliquot the reconstituted solution to minimize freeze-thaw cycles.

Images

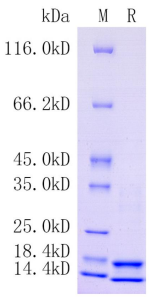


Fig1: Protein on SDS-PAGE under reducing (R) condition.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".