# Recombinant Mouse Caspase-8/CASP8 protein (His Tag)

### Catalog Number: PDEM100250

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description			
Species	Mouse		
Source	E.coli-derived Mouse Caspase-8 protein Ser219-Gly376, with an N-terminal His		
Calculated MW	17.3 kDa		
Observed MW	20 kDa		
Accession	O89110		
Bio-activity	Not validated for activity		
Properties			
Purity	> 95% as determined by reducing SDS-PAGE.		
Endotoxin	< 10 EU/mg of the protein as determined by the LAL method		
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to		
	°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of		
	reconstituted samples are stable at $< -20^{\circ}$ C for 3 months.		
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.		
Formulation	Lyophilized from a 0.2 $\mu$ m filtered solution in PBS with 5% Trehalose and 5%		
	Mannitol.		
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of		
	0.5 mg/mL. Concentration is measured by UV-Vis.		

#### Data

KDa	М	R
135 100 75 65 45	1101	
35		
25		
15	-	
10		

> 95 % as determined by reducing SDS-PAGE.

## Background

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This gene encodes 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, a large protease subunit, and a 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 protein is involved in the programmed cell death induced by Fas and various apoptotic stimuli. The N-terminal FADD-like death effector domain of this protein suggests that it may interact with Fas-interacting protein FAD D. This protein was detected in the insoluble fraction of the affected brain region from Huntington disease patients but not in those from normal controls, which implicated the role in neurodegenerative diseases. Many alternatively spliced transcript variants encoding different isoforms have been described, although not all variants have had their full-length sequences determined.