

Recombinant Protein Technical Manual Recombinant Human CaspaseO/CASP10 Protein (His Tag) RPES4552

Product Data:

Product SKU: RPES4552 **Size:** 10μg

Species: Human Expression host: E. coli

Uniprot: Q92851-2

Protein Information:

Molecular Mass: 30.1 kDa

AP Molecular Mass: 33 kDa

Tag: C-6His

Bio-activity:

Purity: > 90 % as determined by reducing SDS-PAGE.

Endotoxin: $< 1.0 \text{ EU per } \mu\text{g}$ as determined by the LAL method.

Storage: Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

Shipping: This product is provided as liquid. It is shipped at frozen temperature with blue

ice/gel packs. Upon receipt, store it immediately at<-20°C.

Formulation: Supplied as a 0.2 μm filtered solution of 25mM HEPES, 10mM DTT, pH 7.5.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Caspase0; CASP0; Apoptotic Protease Mch-4; FAS-Associated Death Domain

Protein InterleukinB-Converting Enzyme 2; FLICE2; ICE-Like Apoptotic Protease 4;

CASP10; MCH4

Immunogen Information:

Sequence: Val220-Ile480

Background:

Caspase0 (CASP10) is a 521 amino acid protein member of the Cysteine-Aspartic Acid Protease (Caspase) family. CASP10 contains two DED (Death Effector) domains and is detectable in most tissues. CASP10 cleavage by Granzyme B and autocatalytic activity generate the two active subunits: Caspase0 subunit p23/17, Caspase0 subunit p12. Caspases are a family of cytosolic aspartate-specific cysteine proteases involved in the execution-phase of cell apoptosis, the initiation and execution. Human caspases can be subdivided into three functional groups: cytokine activation (caspase, -4, -5, and 3), apoptosis initiation (caspase-2, -8, -9, -and 0), and apoptosis execution (caspase-3, -6, and -7). CASP10 cleaves and activates caspases 3 and 7, but itself is processed by caspase 8. Defects in CASP10 are associated with apoptosis defects seen in type II autoimmune lymphoproliferative syndrome.