



# Recombinant Protein Technical Manual

## Recombinant Human Caspase4/CASP14 Protein (His Tag)(Active)

RPES0642

### Product Data:

**Product SKU:** RPES0642

**Size:** 20µg

**Species:** Human

**Expression host:** E. coli

**Uniprot:** NP\_036246.1

### Protein Information:

**Molecular Mass:** 28.5 kDa

**AP Molecular Mass:** 30 kDa

**Tag:** N-His

**Bio-activity:** Measured by its ability to bind biotinylated Cynomolgus IL18 in a functional ELISA.

**Purity:** > 95 % as determined by reducing SDS-PAGE.

**Endotoxin:** Please contact us for more information.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from sterile PBS, pH 7.4

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

**Application:** Functional ELISA

**Synonyms:** Caspase4; CASP4; CASP14;MGC119078;MGC119079

## Immunogen Information:

**Sequence:** Ser 2-Gln 242

## Background:

Caspase 14 is a member of the caspase family. Caspases are a kind of cysteine proteinase consisting of a prodomain plus large and small catalytic subunits, that play a central role in cell apoptosis. Caspase 14 possesses an unusually short prodomain and is highly expressed in embryonic tissues but absent from most of the adult tissues except for the skin, which suggests a role in ontogenesis and skin physiology. Unlike the other short prodomain caspases (caspase-3, caspase-6, and caspase-7), Caspase 14 was not processed by multiple death stimuli including activation of members of the tumor necrosis factor receptor family and expression of proapoptotic members of the bcl-2 family. Caspase 14 has been described to be processed and activated by anti-Fas agonist antibody or TNF-related apoptosis inducing ligand *in vivo*. The expression and processing of this caspase may take part in keratinocyte terminal differentiation, which is essential for the skin barrier.