

Instruction Manual

Catalog Number	PK-RP577-K231
Components	Recombinant Caspase-1, 25 units Recombinant Caspase-2, 25 units Recombinant Caspase-9, 25 units Recombinant Caspase-10, 25 units
Description	Caspases are known to play an important role in apoptosis. Caspases exist in cells as inactive pro-enzymes. Most of the pro-caspases are matured by proteolysis to yield large and small subunits. Active caspases are heterotetramers, each of which consists of two large and two small subunits.
Quantity	4 x 25 units
Unit Definition	One unit of the recombinant human caspase-1, -2, -9, and -10 is the enzyme activity that cleaves 1 nmol of the caspase substrate YVAD-pNA, VDAD-pNA, LEHD-pNA, and IETD-pNA, respectively, per hour at 37°C in a reaction solution containing 50 mM Hepes, pH 7.2, 50 mM NaCl, 0.1% Chaps, 10 mM EDTA, 5% Glycerol, and 10 mM DTT.
Formulation	Lyophilized powder
Reconstitution	The active recombinant caspases can be reconstituted to 0.1-1 unit per µl in PBS or - for longer stability - in PBS containing 15% glycerol or the Reaction Buffer described above (also available separately from PromoKine, Cat. No. PK-CA577-1068-20 and PK-CA577-1068-80). We recommend using 1 unit per assay for analyzing caspase activity.
Storage	Store at -70°C. Stable for 1 year at -70°C
Applications	Recombinant human caspases were expressed in E. coli and purified. Active recombinant caspases are useful for screen of caspase inhibitors, study enzyme kinetics and regulation, determine rtarget substrate specificity, and as a positive control in caspase activity assays. We recommend using 1 unit per assay for analyzing caspase activity. For a complete caspase activity assay protocol, please refer to PromoKine's Caspase Activity Assay Kits.

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