

Instruction Manual

Catalog Number	PK-RP577-K230
Components	Recombinant Caspase-3, 25 units Recombinant Caspase-6, 25 units Recombinant Caspase-7, 25 units Recombinant Caspase-8, 25 units
Description	Caspases are known to play an important role in apoptosis. Caspases exist in cells as inactive pro-enzymes and mature by proteolysis to yield large and small subunits. Active caspases are heterotetramers consisting of two large and two small subunits.
Quantity	4 x 25 units
Unit Definition	One unit of the recombinant human caspase-3, -6, -7, and -8 is the enzyme activity that cleaves 1 nmol of the caspase substrate DEVD-pNA, VEID-pNA, DEVD-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 -80°C. Stable for 1 year at -80°C
Applications	Highly active human caspases were expressed in E. coli and purified. Active caspases are useful for screening caspase inhibitors, studying enzyme kinetics and regulation, determining target substrates, and as a positive control in caspase activity assays and Western blot analysis. 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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