

Product Information

Active Human Caspases Set IV

I. Kit Contents:

Description	Amount	Cap Color	Part Number
Recombinant Caspase-1	25 units	Yellow	K2060-C-1
Recombinant Caspase-2	25 units	Orange	K2060-C-2
Recombinant Caspase-3	25 units	Red	K2060-C-3
Recombinant Caspase-4	25 units	Orange	K2060-C-4
Recombinant Caspase-5	25 units	Clear	K2060-C-5
Recombinant Caspase-6	25 units	Violet	K2060-C-6
Recombinant Caspase-7	25 units	Red	K2060-C-7
Recombinant Caspase-8	25 units	Green	K2060-C-8
Recombinant Caspase-9	25 units	Blue	K2060-C-9
Recombinant Caspase-10	25 units	Amber	K2060-C-10

II. Introduction:

Caspases are groups of enzymes that involved apoptosis, necrosis and inflammation. These groups can be seperated in to three major classes based on their substrate specificities : Group I (Caspase-1,-4,-5), Group II (Caspase-2,-3,-7), and Group III (Caspase-6,-8,-9,-10). Group I caspases are implicated in the inflammatory cytokines production. Group II are effectors and Group III are upstream activators that mediates apoptosis. The Active Human Caspases Group IV are recombinant caspases that expressed in E.coli and are useful in screening caspase inhibitors, studying enzyme kinetics, determining substrate specificity, and as a positive control in caspase activity assays.

III. Unit Definition:

One unit of the recombinant human caspases is the enzyme activity that cleaves 1 nmol of the individual caspase substrate (YVAD-pNA for Caspase-1, VDVAD-pNA for Caspase-2, DEVD-pNA for Caspase-3, WEHD-pNA for Caspase-4 and -5, VEID-pNA for Caspase-6, DEVD-pNA for Caspase-7, IETD-pNA for Caspase-8 and -10 and LEHD-pNA for Caspase-9) 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.

IV. Reconstitution:

The active recombinant caspases can be reconstituted to 0.1 - 1 unit per μ l in PBS or the Reaction Buffer described above for longer stability. We recommend using 1 unit per assay for analyzing caspase activity.

V. Applications and Usage:

Active recombinant caspases are useful in screening caspase inhibitors, studying enzyme kinetics, determining substrate specificity, and as a positive control in caspase activity assays.

For a complete caspase activity assay protocol, please refer to ApexBio's Fluorometric or Colorimetric Caspase Activity Assay Kits.



For research use only! Not to be used in humans.

Our promise

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For more details, please visit <http://www.apexbt.com/> or contact our technical team.

Tel: +1-(832)696-8203

Fax: +1-832-641-3177

Email: sales@apexbt.com