

## DESCRIPTION

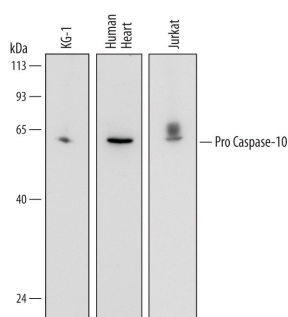
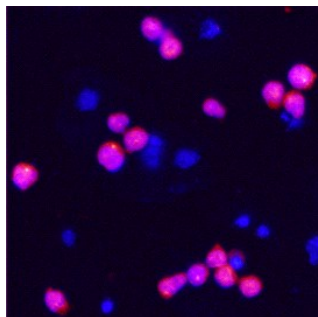
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Pro Caspase-10 in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant human (rh) Caspase-2, rhCaspase-3 (long and short forms), rhCaspase-3, rhCaspase-7, rhCaspase-8, rhCaspase-8 p10, rhCaspase-8 p20 and rhCaspase-9 is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human Pro Caspase-10 Met1-Pro228 Accession # Q92851
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
<b>Western Blot</b>	1 µg/mL	See Below
<b>Immunocytochemistry</b>	5-15 µg/mL	See Below

## DATA

<p><b>Western Blot</b></p>  <p><b>Detection of Human Pro Caspase-10 by Western Blot.</b> Western blot shows lysates of KG-1 human acute myelogenous leukemia cell line, human heart tissue, and Jurkat human acute T cell leukemia cell line. PVDF membrane was probed with 1 µg/mL of Goat Anti-Human Pro Caspase-10 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6864) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). A specific band was detected for Pro Caspase-10 at approximately 60 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 2.</p>	<p><b>Immunocytochemistry</b></p>  <p><b>Pro Caspase-10 in Jurkat Human Cell Line.</b> Pro Caspase-10 was detected in immersion fixed Jurkat human acute T cell leukemia cell line using Goat Anti-Human Pro Caspase-10 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6864) at 5 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for <a href="#">Fluorescent ICC Staining of Non-adherent Cells</a>.</p>
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## PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.2 mg/mL.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

Caspase-10 (Cysteine-aspartic acid protease 10, FLICE2 and Mch4) is a 28-29 kDa member of the peptidase C14A family of enzymes. It is widely expressed, being found in blood and epithelial cells. Caspase-10 appears to be an initiator caspase that acts on procaspases-3, 4, 6, 7, and 9. Human procaspase-10a is a 59 kDa, 521 amino acid (aa) protein. It contains two N-terminal death domains. Cleavage generates p43 plus the small mature p12 subunit. Cleavage of p43 generates a prodomain p25 and large mature p17 subunit. P17 and p12 noncovalently associate to form a 29 kDa mature heterodimer. There are at least four isoform variants. There is no apparent mouse Casp-10 gene.