Cleaved Caspase-3 (Asp175) Antibody

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:
- WB, W-S, IP, IHC-P, IF-IC, FC-FP

Reactivity:
- H M R Mk

Sensitivity: Endogenous

MW (kDa): 17, 19

Source: Rabbit

UniProt ID: #P42574

Entrez-Gene Id: 836

Product Usage Information

<table>
<thead>
<tr>
<th>Application</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Blotting</td>
<td>1:1000</td>
</tr>
<tr>
<td>Simple Western™</td>
<td>1:10 - 1:50</td>
</tr>
<tr>
<td>Immunoprecipitation</td>
<td>1:100</td>
</tr>
<tr>
<td>Immunohistochemistry (Paraffin)</td>
<td>1:400</td>
</tr>
<tr>
<td>Immunofluorescence (Immunocytochemistry)</td>
<td>1:400</td>
</tr>
<tr>
<td>Flow Cytometry (Fixed/Permeabilized)</td>
<td>1:800</td>
</tr>
</tbody>
</table>

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. Do not aliquot the antibody.

Specificity / Sensitivity

Cleaved Caspase-3 (Asp175) Antibody detects endogenous levels of the large fragment (17/19 kDa) of activated caspase-3 resulting from cleavage adjacent to Asp175. This antibody does not recognize full length caspase-3 or other cleaved caspases. This antibody detects non-specific caspase substrates by western blot. Non-specific labeling may be observed by immunofluorescence in specific sub-types of healthy cells in fixed-frozen tissues (e.g. pancreatic alpha-cells). Nuclear background may be observed in rat and monkey samples.

Species predicted to react based on 100% sequence homology:

Bovine, Dog, Pig

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to amino-terminal residues adjacent to (Asp175) in human caspase-3.

Background

Caspase-3 (CPP-32, Apopain, Yama, SCA-1) is a critical executioner of apoptosis, as it is either partially or totally responsible for the proteolytic cleavage of many key proteins, such as the nuclear enzyme poly(ADP-ribose) polymerase (PARP) (1). Activation of caspase-3 requires proteolytic processing of its inactive zymogen into activated p17 and p12 fragments. Cleavage of caspase-3 requires the aspartic acid residue at the P1 position (2).

Background References


Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

<table>
<thead>
<tr>
<th>WB: Western Blotting</th>
<th>W-S: Simple Western™</th>
<th>IP: Immunoprecipitation</th>
</tr>
</thead>
<tbody>
<tr>
<td>IHC-P: Immunohistochemistry (Paraffin)</td>
<td>IF-IC: Immunofluorescence (Immunocytochemistry)</td>
<td></td>
</tr>
<tr>
<td>FC-FP: Flow Cytometry (Fixed/Permeabilized)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Cross-Reactivity Key

Trademarks and Patents

Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc.
Alexa Fluor is a registered trademark of Life Technologies Corporation.
All other trademarks are the property of their respective owners. Visit cellsignal.com/trademarks for more information.

Limited Uses

Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer’s terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and are of no force or effect.

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.