

DESCRIPTION

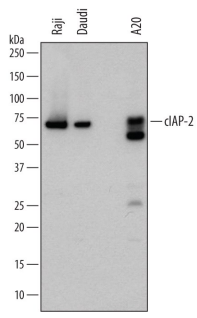
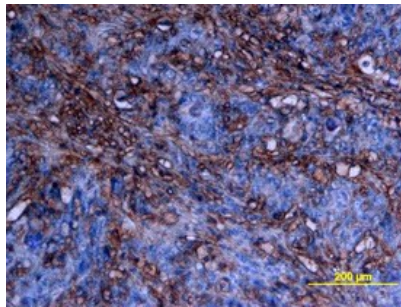
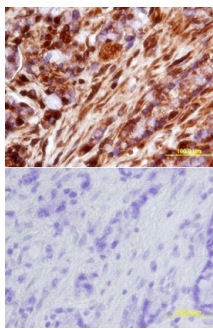
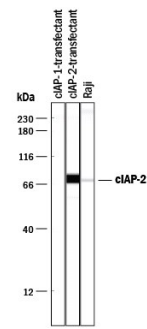
Species Reactivity	Human/Mouse
Specificity	Detects human and mouse cIAP-2/HiAP-1 in Western blots. Does not cross-react with HEK293 cells transfected with cIAP-1.
Source	Monoclonal Mouse IgG ₁ Clone # 315304
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human cIAP-2/HiAP-1 Asn2-Ser604 Accession # Q13489
Formulation	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
Western Blot	0.5 µg/mL	See Below
Immunohistochemistry	8-25 µg/mL	See Below
Simple Western	10 µg/mL	See Below

DATA

<p>Western Blot</p>  <p>Detection of Human and Mouse cIAP-2/HiAP-1 by Western Blot. Western blot shows lysates of Raji human Burkitt's lymphoma cell line, Daudi human Burkitt's lymphoma cell line, and A20 mouse B cell lymphoma cell line. PVDF membrane was probed with 0.5 µg/mL of Mouse Anti-Human/Mouse cIAP-2/HiAP-1 Monoclonal Antibody (Catalog # MAB817) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for cIAP-2/HiAP-1 at approximately 68 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 5.</p>	<p>Immunohistochemistry</p>  <p>cIAP-2/HiAP-1 in Human Colon Cancer Tissue. cIAP-2/HiAP-1 was detected in immersion fixed paraffin-embedded sections of human colon cancer tissue using Mouse Anti-Human/Mouse cIAP-2/HiAP-1 Monoclonal Antibody (Catalog # MAB817) at 25 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections. This application has not been tested in mouse samples.</p>
<p>Immunohistochemistry</p>  <p>cIAP-2/HiAP-1 in Human Colon. cIAP-2/HiAP-1 was detected in immersion fixed paraffin-embedded sections of human colon array using Mouse Anti-Human/Mouse cIAP-2/HiAP-1 Monoclonal Antibody (Catalog # MAB817) at 25 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Lower panel shows a lack of labeling if primary antibodies are omitted and tissue is stained only with secondary antibody followed by incubation with detection reagents. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections. This application has not been tested in mouse samples.</p>	<p>Simple Western</p>  <p>Detection of Human cIAP-2/HiAP-1 by Simple Western™. Simple Western lane view shows lysates of HEK293 human embryonic kidney cell line transfected with either cIAP-1 or cIAP-2 and Raji human Burkitt's lymphoma cell line, loaded at 0.2 mg/mL. A specific band was detected for cIAP-2/HiAP-1 at approximately 74 kDa (as indicated) using 10 µg/mL of Mouse Anti-Human/Mouse cIAP-2/HiAP-1 Monoclonal Antibody (Catalog # MAB817). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.</p>

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	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
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

cIAP-2 (also known as MIHC and HIAP-1) is a member of the inhibitor of apoptosis (IAP) family of proteins that inhibit the proteolytic activity of mature caspases. Human cIAP-2 is a 604 amino acid protein that contains 3 BIR (baculovirus inhibitor of apoptosis) domains, a RING finger domain, and a caspase recruitment domain (CARD). cIAP-2 inhibits caspases through the direct interaction of its BIR domain with the active caspase. Caspase activity may be restored through interactions with the Reaper like motif on mitochondrial proteins such as SMAC/Diablo or HtrA2/Omi. cIAP-2 is reported to be cleaved by HtrA2/Omi.

References:

1. Roy, N. *et al.* (1997) EMBO J. **23**:6914.
2. Deveraux, Q. *et al.* (1997) Nature **388**:300.
3. Deveraux, Q. and J. Reed (1999) Genes & Develop. **13**:239.
4. Srinivasula, S.M. *et al.* (2003) J. Biol. Chem. **278**:31469.
5. Yang, Q-H. *et al.* (2003) Genes Dev. **17**:1487.