

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human cIAP-1/HIAP-2. Does not cross-react with recombinant human cIAP-2 or XIAP.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human cIAP-1/HIAP-2 His2-Ser618 Accession # Q13490
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 either lyophilized or as a 0.2 µm filtered solution in PBS.

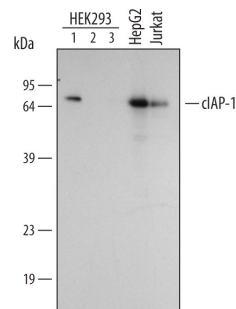
APPLICATIONS

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	5-15 µg/mL	See Below
Simple Western	5 µg/mL	See Below
Knockout Validated	cIAP-1/HIAP-2 is specifically detected in HeLa human cervical epithelial carcinoma parental cell line but is not detectable in cIAP-1/HIAP-2 knockout HeLa cell line.	

DATA

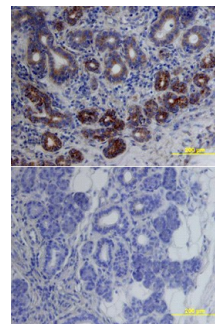
Western Blot



Detection of Human cIAP-1/HIAP-2 by Western Blot.

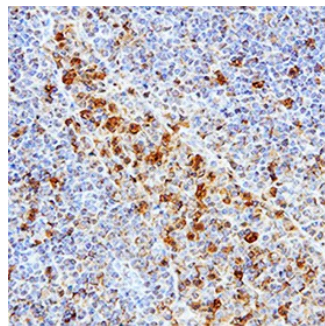
Western blot shows lysates of HEK293 human embryonic kidney cell line transfected with human cIAP-1 (lane 1), human cIAP-2 (lane 2), or non-transfected (lane 3). PVDF membrane was probed with 0.5 µg/mL Goat Anti-Human cIAP-1/HIAP-2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF8181) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). For additional reference, lysates of HepG2 human hepatocellular carcinoma cell line and Jurkat human acute T cell leukemia cell line were included. A specific band for cIAP-1/HIAP-2 was detected at approximately 65 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 2.

Immunohistochemistry



cIAP-1/HIAP-2 in Human Lymphoma. cIAP-1/HIAP-2 was detected in immersion fixed paraffin-embedded sections of human lymphoma using Goat Anti-Human cIAP-1/HIAP-2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF8181) at 15 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) 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](#).

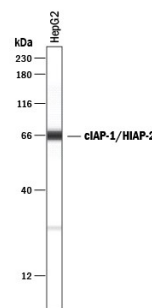
Immunohistochemistry



cIAP-1/HIAP-2 in Human Lymph Node.

cIAP-1/HIAP-2 was detected in immersion fixed paraffin-embedded sections of human lymph node using Goat Anti-Human cIAP-1/HIAP-2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF8181) at 10 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). Specific staining was localized to lymphocytes. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

Simple Western

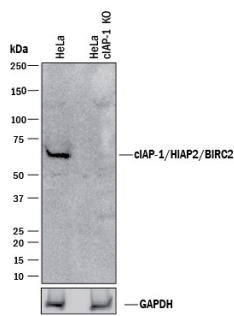


Detection of Human cIAP-1/HIAP-2 by Simple Western™.

Simple Western lane view shows lysates of HepG2 human hepatocellular carcinoma cell line, loaded at 0.5 mg/mL. A specific band was detected for cIAP-1/HIAP-2 at approximately 66 kDa (as indicated) using 5 µg/mL of Goat Anti-Human cIAP-1/HIAP-2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF8181) followed by 1:50 dilution of HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF019). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.

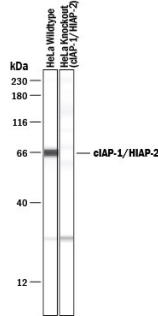


Knockout Validated



Western Blot Shows Human cIAP-1/HIAP-2 Specificity by Using Knockout Cell Line. Western blot shows lysates of HeLa human cervical epithelial carcinoma parental cell line and cIAP-1/HIAP-2 knockout HeLa cell line (KO). PVDF membrane was probed with 0.5 µg/mL of Goat Anti-Human cIAP-1/HIAP-2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF8181) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). A specific band was detected for cIAP-1/HIAP-2 at approximately 68 kDa (as indicated) in the parental HeLa cell line, but is not detectable in knockout HeLa cell line. GAPDH (Catalog # AF5718) is shown as a loading control. This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Knockout Validated



Specificity of Human cIAP-1/HIAP-2 by Simple Western™. Simple Western lane view shows lysates of HeLa human cervical epithelial carcinoma parental cell line and cIAP-1/HIAP-2 knockout HeLa cell line (KO), loaded at 0.2 mg/mL. A specific band was detected for cIAP-1/HIAP-2 at approximately 66 kDa (as indicated) in the parental HeLa cell line, but is not detectable in knockout HeLa cell line. Goat Anti-Human cIAP-1/HIAP-2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF8181) was used at 5 µg/mL followed by 1:50 dilution of HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF019). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 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-1 (also known as BIR2, MIHB and HIAP-2) is a member of the inhibitor of apoptosis (IAP) family of proteins that inhibit the proteolytic activity of mature caspases. cIAP-1 has 3 BIR (baculovirus inhibitor of apoptosis) domains, a RING finger domain, and a caspase recruitment domain (CARD). cIAP-1 inhibits caspases by interaction of the 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 HTRA-2/Omi. cIAP-1 is reported to be cleaved by caspases in fetal rat hepatocytes treated with TGF-β.

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. Herrera, B. *et al.* (2002) FEBS Letters **520**:93.