

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human cIAP-1/HIAP-2 in direct ELISAs and Western blots. In direct ELISAs, 100% cross-reactivity with recombinant human (rh) cIAP-2 (aa 2-604) and no cross-reactivity with rhBIRC6 (aa 4582-4735), rhcIAP-2 (aa 94-178), rhXIAP (aa 1-497), rhXIAP (BIR2 domain; aa 124-242), or rhXIAP (BIR3 domain; aa 252-356) is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 681732
Purification	Protein A or G purified from hybridoma culture supernatant
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.

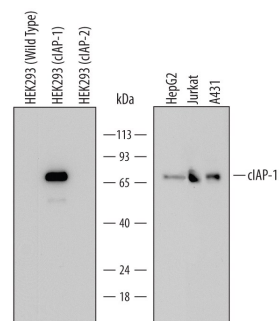
APPLICATIONS

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	1 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.	

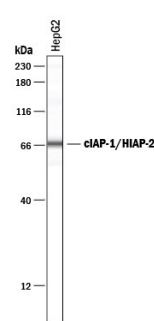
DATA

Western Blot



Detection of Human cIAP-1/HIAP-2 by Western Blot. Western blot shows lysates of HEK293 human embryonic kidney cell line either mock transfected, transfected with full length human cIAP-1, or transfected with full length human cIAP-2, HepG2 human hepatocellular carcinoma cell line, Jurkat human acute T cell leukemia cell line, and A431 human epithelial carcinoma cell line. PVDF Membrane was probed with 1 µg/mL of Human cIAP-1/HIAP-2 Monoclonal Antibody (Catalog # MAB818) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for cIAP-1/HIAP-2 at approximately 72 kDa (as indicated). This experiment was conducted under reducing conditions and using [Immunoblot Buffer Group 2](#).

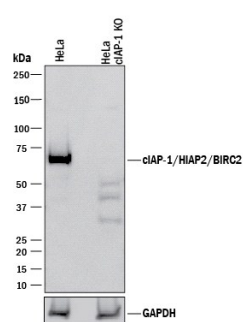
Simple Western



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 0.2 mg/mL. A specific band was detected for cIAP-1/HIAP-2 at approximately 66 kDa (as indicated) using 5 µg/mL of Mouse Anti-Human cIAP-1/HIAP-2 Monoclonal Antibody (Catalog # MAB818). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.

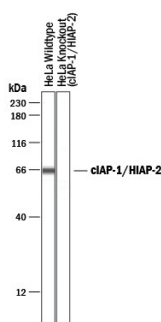


Knockout Validated



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 1 µg/mL of Mouse Anti-Human cIAP-1/HIAP-2 Monoclonal Antibody (Catalog # MAB818) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). 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 # MAB5718) 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. Mouse Anti-Human cIAP-1/HIAP-2 Monoclonal Antibody (Catalog # MAB818) was used at 5 µg/mL. This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.



PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
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	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <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.