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**MATERIAL DATA SHEET**

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**Recombinant Human His10 cIAP-1/HiAP-2****Cat. # E3-280**

Cellular inhibitor of apoptosis protein 1 (cIAP-1, also known as BIRC2, MIHB, and HIAP2) is a member of the inhibitor of apoptosis (IAP) family of proteins that inhibit the proteolytic activity of mature caspases. Structurally, cIAP-1 is comprised of 3 BIR (baculovirus inhibitor of apoptosis) domains, a RING finger domain, and a caspase recruitment domain (CARD). Functionally, cIAP-1 inhibits caspases through the direct interaction of its BIR domain with the active caspase. The ring finger domain of cIAP-1 also functions as an E3 ubiquitin ligase to ubiquitinate specific target proteins. Caspase activity may be restored by mitochondrial proteins, such as SMAC/Diablo or HtrA2/Omi, through interactions with the Reaper-like motif and the BIR domain.

**Product Information**

<b>Quantity:</b>	50 µg
<b>MW:</b>	72 kDa
<b>Source:</b>	<i>E. coli</i> -derived Contains an N-terminal 10-His tag Accession # Q13490
<b>Stock:</b>	X mg/ml (X µM) in 50 mM HEPES pH 8.0, 500 mM NaCl, 20% Glycerol (v/v), 5 mM TCEP, 0.5 mM EDTA
<b>Purity:</b>	>85%, by SDS-PAGE under reducing conditions and visualized by Colloidal Coomassie® Blue stain.

**Use & Storage**

<b>Use:</b>	Recombinant Human cIAP-1/HiAP-2 is a RING finger Ubiquitin ligase (E3) that functions downstream of a Ubiquitin-activating (E1) enzyme and a Ubiquitin-conjugating (E2) enzyme to conjugate Ubiquitin to substrate proteins. Reaction conditions will need to be optimized for each specific application. We recommend an initial cIAP-1 concentration of 0.2-1 µM.
<b>Storage:</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"><li>• 6 months from date of receipt, -70 °C as supplied.</li><li>• 3 months, -70 °C under sterile conditions after opening.</li></ul>

## Literature

### References:

1. Gyrd-Hansen M. & Meier P. (2010) Nat. Rev. Cancer **10**: 561
2. Bertrand M.J, *et al.* (2011) PLoS ONE **6**: E22356
3. Kulathila R., *et al.* (2009) Acta Crystallogr. D **65**: 58
4. Lopez J., *et al.* (2011) Mol. Cell **42**: 569

*For research use only. Not for use in humans.*