

CARP2 (Caspases-8 and -10 associated RING finger protein 2)

Cat. # UB302

Background: CARP2 (caspase 8/10 associated RING protein 2) is a RING-domain E3 (ubiquitin protein ligase) that is involved in the conjugation of ubiquitin to target substrates along with E1 and E2 enzymes. CARPs (CARP1 and CARP2, 77% identity) also belong to the IAP family (inhibitors of apoptosis proteins) inhibiting activation of DED (death effector domain) containing caspase proteins (8/10). In addition to targeting caspases 8/10 CARPs have been shown to target phosphorylated p53 for degradation in an Hdm2 independent manner. Furthermore CARP2 has been shown to be a negative regulator of TNF induced NF- κ B activation by targeting RIP for degradation.

Alternate names: RFFL (ring finger and FYVE-like domain containing 1)

Product Information

Purity:	≥ 95% by SDS-PAGE
Molecular Weight:	41kDa
Quantity:	25 μ g
Physical State:	Liquid
Source:	Human Recombinant
Tag:	His ₆ SUMO
Activity:	Typical enzyme concentration of 100 nM - 5 mM is used for in vitro conjugation, depending on conditions.
Storage:	-80° C. Avoid repeated freeze/thaw cycles

References

- 1) Yang, W., et al., CARPs are ubiquitin ligases that promote MDM2-independent p53 and phospho-p53ser20 degradation. *J Biol Chem*, 2007. **282**:3273-81.
- 2) Yang, W. and W.S. El-Deiry, CARPs are E3 ligases that target apical caspases and p53. *Cancer Biol Ther*, 2007. **6**:1676-83.
- 3) McDonald, E.R., 3rd and W.S. El-Deiry, Suppression of caspase-8- and -10-associated RING proteins results in sensitization to death ligands and inhibition of tumor cell growth. *Proc Natl Acad Sci USA*, 2004. **101**:6170-5.
- 4) Tibbetts, M.D., et al., Crystal structure of a FYVE-type zinc finger domain from the caspase regulator CARP2. *Structure*, 2004. **12**:2257-63.
- 5) Liao, W., et al., CARP-2 is an endosome-associated ubiquitin ligase for RIP and regulates TNF-induced NF- κ B activation. *Curr Biol*, 2008. **18**:641-9.

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