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

Cat. # UB302

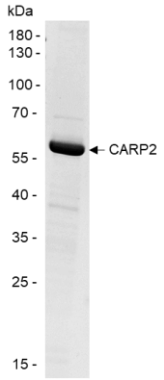
Background

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-κB activation by targeting RIP for degradation.

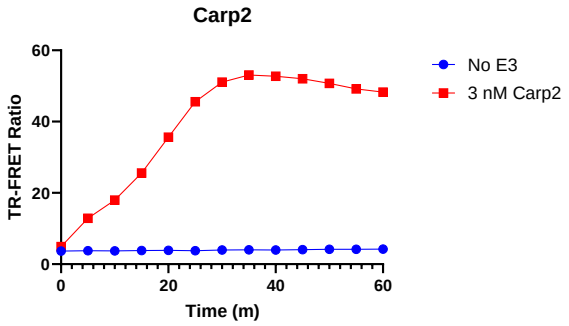
Product Information

Purity	≥ 90% by SDS-PAGE
Molecular Weight	41 kDa (Without Tag), ~55kDa with SUMO tag
Quantity	25 µg
Physical State	Liquid
Species	Human
Source	*E. coli*
Tag	His6-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

Product QC



SDS-Page Analysis of purified CARP2. Two µg of the protein was loaded on a 10-20% SDS-PAGE gel and stained with Coomassie brilliant blue.



Activity Assay of Carp2. 3 nM Carp2 was tested in a TR-FRET assay showing robust E3 ligase activity.

References

1. Sharma, R., et al., FEBS J., 2023. 290(14):3580-3594.
2. Weng, X., et al., Int J Biol Macromol., 2023. 224:713-724.