

Background

E6-AP (E6-associated protein) is an E3 (ubiquitin protein ligase) that is involved in the conjugation of ubiquitin to target substrates, along with E1 and E2 enzymes. It is a HECT domain E3 containing an active site cysteine, which accepts a charged ubiquitin from the ubiquitin-E2 thioester complex. E6-AP has been linked to a neurodevelopmental disorder, Angelman syndrome. In addition, the oncoprotein E6 of human papillomaviruses (HPV) utilizes E6-AP to target numerous cellular proteins for degradation, including the tumor suppressor protein p53.

Alternate Names

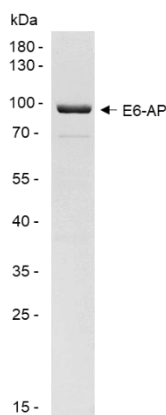
Human Papillomavirus E6-Associated Protein (HPVE6A), Ubiquitin Protein Ligase E3A, Renal Carcinoma Antigen NY-REN-54, E6AP, Oncogenic Protein-Associated Protein E6-AP, HECT-Type Ubiquitin Transferase E3A

Application(s)

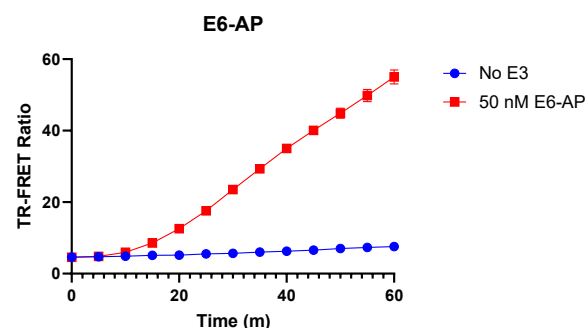
In vitro conjugation assay

Product Specifications

Affinity tag	None
Purity	> 85% by SDS-PAGE
Molecular Weight	101 kDa
Quantity	25 µg
Species	Human
Expression System	<i>E. coli</i>
Physical State	Liquid
Buffer	20 mM Hepes pH 7.5, 150 mM NaCl, 10% glycerol
Activity	A typical enzyme concentration of 10-100 nM is used for in vitro conjugation, depending on experimental conditions.
Storage	Store at -80°C. Avoid repeated freeze/thaw cycles

Product QC

SDS-Page Analysis of purified E6-AP. Two µg of the protein was loaded on a 10-20% SDS-PAGE gel and stained with Coomassie brilliant blue.



Activity Assay of E6-AP. 50 nM E6-AP was tested in a TR-FRET assay showing robust E3 ligase activity.

References

1. Owais, A., et al., Cancers (Basel), 2020. 12(8):2108.
2. Sailer, C., et al., Nat Commun., 2018. 9(1):4441.

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