# Recombinant Human papillomavirus type 16 Protein E6

Catalog No: #AP72997

Package Size: #AP72997-1 20ug #AP72997-2 100ug #AP72997-3 1mg

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## Description

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| Product Name | Recombinant Human papillomavirus type 16 Protein E6 |
| Brief Description | Recombinant Protein |
| Host Species | Yeast |
| Purification | Greater than 90% as determined by SDS-PAGE. |
| Immunogen Description | Expression Region:1-158aaSequence Info:Full Length |
| Accession No. | P03126 |
| Uniprot | P03126 |
| GeneID | 1489078; |
| Calculated MW | 21.2 kDa |
| Tag Info | N-terminal 6xHis-tagged |
| Target Sequence | MHQKRTAMFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPYAVCDKC LKFYSKISEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLDKKQRFHNIRGRWTGRCMSC CRSSRTRRETQL |
| Formulation | Tris-based buffer50% glycerol |
| Storage | The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.<br>Generally, the shelf life of liquid form is 6 months at -20°C,-80°C. The shelf life of lyophilized form is 12 months at -20°C,-80°C.Notes:Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week. |

## Background

Plays a major role in the induction and maintenance of cellular transformation. Acts mainly as an oncoprotein by stimulating the destruction of many host cell key regulatory proteins. E6 associates with host E6-AP ubiquitin-protein ligase, and inactivates tumor suppressors TP53 and TP73 by targeting th to the 26S proteasome for degradation. In turn, DNA damage and chromosomal instabilities increase and lead to cell proliferation and cancer development. The complex E6,E6P targets several other substrates to degradation via the proteasome including host NFX1-91, a repressor of human telomerase reverse transcriptase (hTERT). The resulting increased expression of hTERT prevents the shortening of telomere length leading to cell immortalization. Other cellular targets including Bak, Fas-associated death domain-containing protein (FADD) and procaspase 8, are degraded by E6,E6AP causing inhibition of apoptosis. E6 also inhibits immune response by interacting with host IRF3 and TYK2. These interactions prevent IRF3 transcriptional activities and inhibit TYK2-mediated JAK-STAT activation by interferon alpha resulting in inhibition of the interferon signaling pathway.

## References

Oncogenic human papillomavirus E6 proteins target the MAGI-2 and MAGI-3 proteins for degradation.Thomas M., Laura R., Hepner K., Guccione E., Sawyers C., Lasky L., Banks L.Oncogene 21:5088-5096(2002)Research Topic:Epigenetics and Nuclear Signaling

Note: This product is for in vitro research use only