

### **E7** Antibody

Purified Mouse Monoclonal Antibody Catalog # AO1531a

# **Specification**

# **E7 Antibody - Product Information**

Application WB, IHC, E
Primary Accession P03129
Reactivity Human
Host Mouse
Clonality Monoclonal
Isotype IgG1

Calculated MW 21kDa KDa

**Description** 

E7 transforming protein (Human papillomavirus type 16).

#### **Immunogen**

Purified recombinant fragment of E7 expressed in E. Coli.

#### **Formulation**

Ascitic fluid containing 0.03% sodium azide.

## **E7 Antibody - Additional Information**

Gene ID 1489079

## **Other Names**

Protein E7, E7

# **Dilution**

WB~~1/500 - 1/2000 IHC~~1/500 - 1/2000 E~~1/10000

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

# **Precautions**

E7 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# **E7 Antibody - Protein Information**

Name E7 {ECO:0000255|HAMAP-Rule:MF\_04004}

#### **Function**

Plays a role in viral genome replication by driving entry of quiescent cells into the cell cycle.



Stimulation of progression from G1 to S phase allows the virus to efficiently use the cellular DNA replicating machinery to achieve viral genome replication. E7 protein has both transforming and trans-activating activities. Induces the disassembly of the E2F1 transcription factor from RB1, with subsequent transcriptional activation of E2F1-regulated S-phase genes. Interferes with host histone deacetylation mediated by HDAC1 and HDAC2, leading to transcription activation. Also plays a role in the inhibition of both antiviral and antiproliferative functions of host interferon alpha. Interaction with host TMEM173/STING impairs the ability of TMEM173/STING to sense cytosolic DNA and promote the production of type I interferon (IFN-alpha and IFN-beta).

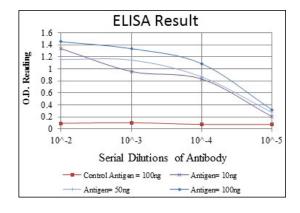
# **Cellular Location**

 $\label{lossym} $$ Host \ cytoplasm \{ECO:0000255|HAMAP-Rule:MF_04004, \ ECO:0000269|PubMed:18996550, \ ECO:0000269|PubMed:3033296\}. \ Host \ nucleus \{ECO:0000255|HAMAP-Rule:MF_04004, \ ECO:0000269|PubMed:18996550\} \ Note=Predominantly \ found \ in the host \ nucleus. \\ \{ECO:0000255|HAMAP-Rule:MF_04004, \ ECO:0000269|PubMed:18996550\} \\ \ $$$ 

# **E7 Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture





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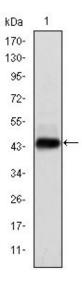


Figure 1: Western blot analysis using E7 mAb against human E7 (AA: 1-98) recombinant protein.

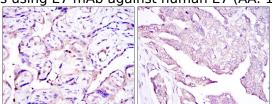


Figure 2: Immunohistochemical analysis of paraffin-embedded placenta tissues (left) and ovarian cancer (right) using E7 mouse mAb with DAB staining.

# **E7 Antibody - References**

1. Methods Mol Med. 2005;119:363-79. 2. Viral Immunol. 2006 Summer;19(3):468-80.