



# Mouse Anti-HPV16 L2 Monoclonal Antibody, clone 3K63 (CABT-L3242M)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Immunogen</b>	Amino acids 1-40 of HPV16 L2
<b>Isotype</b>	IgG1
<b>Source/Host</b>	Mouse
<b>Species Reactivity</b>	HPV16
<b>Clone</b>	3K63
<b>Purification</b>	Purified
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	WB, IF Recommended dilution: WB: 1:100-1:1000 IF: 1:50-1:200
<b>Format</b>	Liquid
<b>Concentration</b>	Lot specific
<b>Size</b>	200 µg
<b>Buffer</b>	PBS with < 0.1% sodium azide and 0.1% gelatin.
<b>Preservative</b>	< 0.1% sodium azide
<b>Storage</b>	Store at 4°C. DO NOT FREEZE.

## BACKGROUND

### Introduction

Human papillomaviruses, particularly type 16 (designated HPV16), infect the genital tract and may lead to cervical cancer. Protection against HPV16 is thought to be provided by neutralizing antibodies directed to the major capsid protein L1 of HPV16. HPV16 L1 forms the pentameric assembly unit of the viral shell, and the binding of HPV16 L1 to the cell surface without the involvement of minor capsid protein L2 is believed to be the first step of HPV16 infection. The L1-binding domain located near the C-terminus of L2 binds L1 prior to completion of capsid assembly and is required for efficient encapsidation of the viral genome. In addition, the C-terminus of L1 is necessary for both DNA binding and DNA packaging. Expression of the late gene L1 is restricted to the upper layers of the infected epithelium. HPV16 L1 is able to package unrelated plasmid DNA in vitro and deliver the foreign DNA to eukaryotic cells with the subsequent expression of the encoded gene. L1 shows a diffuse nuclear distribution whereas L2 is localized to punctate nuclear regions identified as promonocytic leukemia protein oncogenic domains (PODs). Coexpression of L1 and L2 induces a relocalization of L1 into the PODs.

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### Keywords

HPV16;Human papillomavirus 16;Human papillomavirus16

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