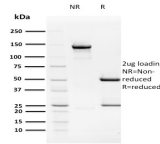


# Human Papillomavirus 16 (HPV16) E2 Monoclonal Mouse Antibody (TVG 261)



## Product Description

The human papilloma virus (HPV) family of DNA tumor viruses includes HPV16, a strain that is responsible for the largest number of cases of cervical cancers linked to the family. HPV16E1 and HPV16E2 are proteins that are involved in the regulation of viral DNA replication and are important for infected cell homeostasis. HPV16E2 specifically regulates the expression of the E6 and E7 oncoproteins by binding to four sites within the viral long control region, possibly involving interactions with nuclear hormone receptors. Integration of the HPV genome into the host DNA usually disrupts the HPV16E2 gene open reading frames, resulting in an overexpression of E6 and E7 genes, an event that may lead to the malignant transformation of cervical cancer. HPV16E2 is also able to induce apoptotic cell death via two pathways: the first through the binding of p53 and the second through the binding of the viral genome. Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the [CF® Dye Brochure](#) for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors. **Stock status:** Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email [order@biotium.com](mailto:order@biotium.com) to inquire about stock status and lead times before placing your order.

## References

Note: References for this clone sold by other suppliers may be listed for expected applications.

1. J Virol (2003) 77(3): 2021-2028. (WB)
2. J Virol (2017) 91(5): e02305-16. (IF)
3. Virology (2018) 521: 62-68. (WB)

## Product attributes

Antibody number	#3073
Antibody reactivity (target)	HPV16 E2
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	TVG 261
Isotype	IgG1, kappa
Molecular weight	43 kDa
Synonyms	HPV16 regulatory protein E2; Human papilloma virus 16 E2; Human papilloma virus 16 regulatory protein E2; Human papillomavirus type 16 E2; Human papillomavirus type 16 regulatory protein E2; Regulatory protein E2
Human gene symbol	Not Applicable
Entrez gene ID	Not Applicable
SwissProt	Not Applicable
Unigene	Not Applicable
Immunogen	Raised against Vaccinia-E2 followed by intravenous injection of the maltose binding protein MBP-E2
Antibody target cellular localization	Nucleus
Species reactivity	HPV-16
Expected antibody applications	IF (published for clone), WB (published for clone)
Antibody application notes	Western blot 1-2 µg/mL; Optimal dilution for a specific application should be determined.
Positive control	HPV-16 infected cells. Cervical tissue.
Shipping condition	Room temperature
Storage Conditions	Note: store BSA-free antibodies at -10 to -35 °C, Store at 2 to 8 °C, Protect fluorescent conjugates from light
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.2 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Tumor expression	Cervical cancer

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405
BNC88	CF®488A	490/515	488	GFP, FITC
BNC68	CF®568	562/583	532, 561	RFP, TRITC
BNC94	CF®594	593/614	561	Texas Red®
BNC40	CF®640R	642/662	633-640	Cy®5
BNC47	CF®647	650/665	633-640	Cy®5
BNCB	Biotin	N/A	N/A	N/A
BNUB	Purified	N/A	N/A	N/A
BNUM	Purified, BSA-free	N/A	N/A	N/A

## Dye Features

- [CF®405S Features](#)
- [CF®488A Features](#)
- [CF®568 Features](#)
- [CF®594 Features](#)
- [CF®640R Features](#)
- [CF®647 Features](#)

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