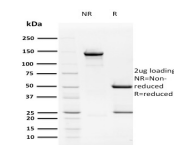


Human Papillomavirus 16 (HPV16) E2 Monoclonal Mouse Antibody (TVG 261)



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 to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 3073, Anti-HPV16 E2 (TVG 261)

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 ug/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: 0.1 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 |
| Product origin | Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot. |
| Tumor expression | Cervical cancer |

| Antibody # prefix | Conjugation | Ex/Em (nm) | Laser line | Detection channel | Dye Features |
|-------------------|--------------------|------------|------------|--------------------------|----------------------------------|
| BNC04 | CF®405S | 404/431 | 405 | DAPI (microscopy), AF405 | CF®405S Features |
| BNC88 | CF®488A | 490/515 | 488 | GFP, FITC | CF®488A Features |
| BNC68 | CF®568 | 562/583 | 532, 561 | RFP, TRITC | CF®568 Features |
| BNC94 | CF®594 | 593/614 | 561 | Texas Red® | CF®594 Features |
| BNC40 | CF®640R | 642/662 | 633-640 | Cy®5 | CF®640R Features |
| BNC47 | CF®647 | 650/665 | 633-640 | Cy®5 | CF®647 Features |
| BNC74 | CF®740 | 742/767 | 633-685 | 775/50 | CF®740 Features |
| 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 | |

Alexa Fluor, Pacific Blue, Pacific Orange, and Texas Red are trademarks or registered trademarks of Thermo Fisher Scientific; Cy is a registered trademark of Cytiva; IRDye, LI-COR, and Odyssey are registered trademarks of LI-COR Bioscience.

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)

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