

TDP2 / EAPII Monoclonal Mouse Antibody (TDP2/1258)

Product Description

This MAbs recognizes a protein of 41 kDa, which is identified as TDP2. It is a member of a superfamily of divalent cation-dependent phosphodiesterases. The encoded protein associates with CD40, tumor necrosis factor (TNF) receptor-75 and TNF receptor associated factors (TRAFs), and inhibits nuclear factor-kappa-B activation. This protein has sequence and structural similarities with APE1 endonuclease, which is involved in both DNA repair and the activation of transcription factors. DNA repair enzyme that can remove a variety of covalent adducts from DNA through hydrolysis of a 5'-phosphodiester bond, giving rise to DNA with a free 5' phosphate. Catalyzes the hydrolysis of dead-end complexes between DNA and the topoisomerase 2 (TOP2) active site tyrosine residue. Hydrolyzes 5'-phosphoglycolates on protruding 5' ends on DNA double-strand breaks (DSBs) due to DNA damage by radiation and free radicals. The 5'-tyrosyl DNA phosphodiesterase activity can enable the repair of TOP2-induced DSBs without the need for nuclease activity, creating a 'clean' DSB with 5'-phosphate termini that are ready for ligation. Has also 3'-tyrosyl DNA phosphodiesterase activity, but less efficiently and much slower than TDP1. May also act as a negative regulator of ETS1 and may inhibit nuclear factor-kappa-B activation.

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 1258, Anti-EAPII (TDP2/1258)

Product attributes

| | |
|---------------------------------------|---|
| Antibody number | #1258 |
| Antibody reactivity (target) | EAPII, TDP2 |
| Antibody type | Primary |
| Host species | Mouse |
| Clonality | Monoclonal |
| Clone | TDP2/1258 |
| Isotype | IgG2b, kappa |
| Molecular weight | ~41 kDa |
| Synonyms | 5'-Tyr-DNA phosphodiesterase; EAP2; EAPII; ETS1-associated protein 2; ETS1-associated protein II; TRAF and TNF receptor-associated protein; TTRAP; Tyr-DNA phosphodiesterase 2; Tyrosyl-DNA phosphodiesterase 2 (TDP2) |
| Human gene symbol | TDP2 |
| Entrez gene ID | 51567 (Human) |
| SwissProt | O95551 (Human) |
| Unigene | 728795 (Human) |
| Immunogen | Recombinant human full-length TDP2 protein |
| Verified antibody applications | IHC (FFPE) (verified) |
| Antibody target cellular localization | Nucleus & cytoplasm |
| Species reactivity | Human |
| Antibody application notes | Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody. Immunofluorescence: 0.5-1 ug/mL. Immunohistology (formalin): 0.5-1 ug/mL. Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM Tris, 1 mM EDTA pH 9.0 for 10-20 min followed by cooling at RT for 20 min. Flow Cytometry 0.5-1 ug/million cells/0.1 mL. Optimal dilution for a specific application should be determined by user |
| Positive control | Jurkat cells. Lung, Duodenum or Small Intestinal Carcinoma. |
| Shipping condition | Room temperature |
| Storage Conditions | Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C |
| Shelf life | Guaranteed for at least 24 months from date of receipt when stored as recommended |
| 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 |
| Antibody research areas | Signal transduction |
| 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. |

| 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.

This datasheet was generated on April 29, 2025 at 02:35:52 AM. Visit product page to check for updated information before use. Product link: <https://biotium.com/product/mouse-monoclonal-anti-tdp2-eapii-tdp21258/>