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TDP1 Antibody (Clone AT1F2)

Mouse Monoclonal Antibody

Catalog # ABV11248

Specification

TDP1 Antibody (Clone AT1F2) - Product Information

Application	**WB**
Primary Accession	Q9NUW8
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**Mouse IgG1k**
Calculated MW	**68420**

TDP1 Antibody (Clone AT1F2) - Additional Information

Gene ID 55775

Positive Control	**Western blot: MCF7 Cell lysate**
Application & Usage	**Western blot: ~1:1000 - 2000, ELISA.**

Other Names
Tyrosyl-DNA phosphodiesterase 1, TDP1 protein, TDP1.

Target/Specificity
TDP1

Antibody Form
Liquid

Appearance
Colorless liquid

Formulation
Supplied in PBS with 0.1% sodium azide.

Handling
The antibody solution should be gently mixed before use.

Reconstitution & Storage
-20 °C

Background Descriptions

Precautions
TDP1 Antibody (Clone AT1F2) is for research use only and not for use in diagnostic or therapeutic procedures.

TDP1 Antibody (Clone AT1F2) - Protein Information

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Name TDP1

Function
DNA repair enzyme that can remove a variety of covalent adducts from DNA through hydrolysis of a 3'-phosphodiester bond, giving rise to DNA with a free 3' phosphate. Catalyzes the hydrolysis of dead- end complexes between DNA and the topoisomerase I active site tyrosine residue. Hydrolyzes 3'-phosphoglycolates on protruding 3' ends on DNA double-strand breaks due to DNA damage by radiation and free radicals. Acts on blunt-ended double-strand DNA breaks and on single-stranded DNA. Has low 3'exonuclease activity and can remove a single nucleoside from the 3'end of DNA and RNA molecules with 3'hydroxyl groups. Has no exonuclease activity towards DNA or RNA with a 3'phosphate.

Cellular Location
Nucleus. Cytoplasm

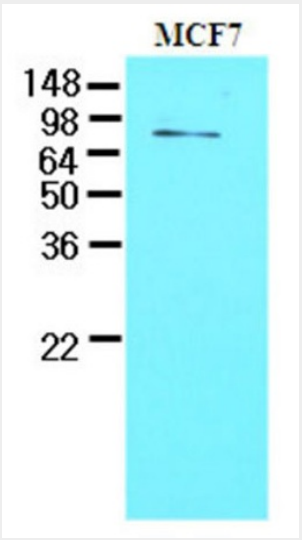
Tissue Location
Ubiquitously expressed. Similar expression throughout the central nervous system (whole brain, amygdala, caudate nucleus, cerebellum, cerebral cortex, frontal lobe, hippocampus, medulla oblongata, occipital lobe, putamen, substantia nigra, temporal lobe, thalamus, nucleus accumbens and spinal cord) and increased expression in testis and thymus.

TDP1 Antibody (Clone AT1F2) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

TDP1 Antibody (Clone AT1F2) - Images



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Cell lysates of MCF7 (30ug) were resolved by SDS-PAGE, transferred to NC membrane and probed with anti-human TDP1 (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.

TDP1 Antibody (Clone AT1F2) - Background

Tyrosyl-DNA phosphodiesterase (TDP1) is a DNA repair enzyme that catalyzes the hydrolysis of a phophodiester bond between a tyrosine residue and a DNA 3' phosphate. This protein is a member of the phospholipase D (PLD) superfamily and contains two PLD phosphodiesterase domains. Mutations in TDP1 are associated with the disease spino-cerebellar ataxia with axonal neuropathy (SCAN1) by interfering with DNA transcription or by inducting apoptosis in postmitotic neurons.