

TDP1 Antibody (Clone AT1F2)
Mouse Monoclonal Antibody
Catalog # ABV11248**Specification**

TDP1 Antibody (Clone AT1F2) - Product Information

Application	WB
Primary Accession	O9NUW8
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**

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

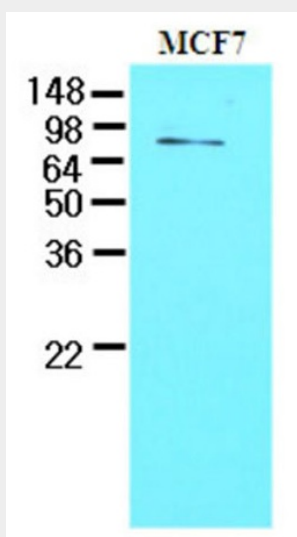
Tissue Location

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 Cytometry](#)
- [Cell Culture](#)

TDP1 Antibody (Clone AT1F2) - Images

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 phosphodiester 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 inducing apoptosis in postmitotic neurons.