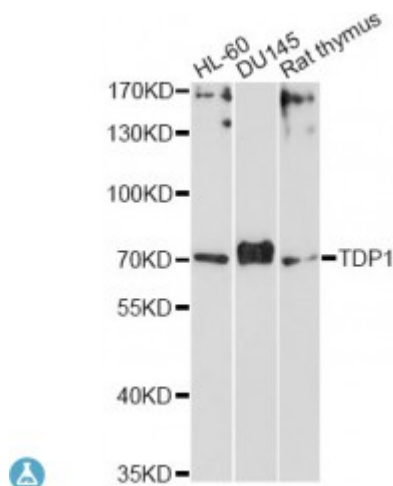


Anti-TDP1 Antibody



Description

The protein encoded by this gene is involved in repairing stalled topoisomerase I-DNA complexes by catalyzing the hydrolysis of the phosphodiester bond between the tyrosine residue of topoisomerase I and the 3-prime phosphate of DNA. This protein may also remove glycolate from single-stranded DNA containing 3-prime phosphoglycolate, suggesting a role in repair of free-radical mediated DNA double-strand breaks. This gene is a member of the phospholipase D family and contains two PLD phosphodiesterase domains. Mutations in this gene are associated with the disease spinocerebellar ataxia with axonal neuropathy (SCAN1).

Model	STJ116265
Host	Rabbit
Reactivity	Human, Rat
Applications	WB
Immunogen	Recombinant fusion protein containing a sequence corresponding to amino acids 1-140 of human TDP1 (NP_060789.2).
Gene ID	55775
Gene Symbol	TDP1
Dilution range	WB 1:500 - 1:2000
Tissue Specificity	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

Purification	Affinity purification
Note	For Research Use Only (RUO).
Protein Name	Tyrosyl-DNA phosphodiesterase 1 Tyr-DNA phosphodiesterase 1
Molecular Weight	68.42 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Storage Instruction	Store at -20C. Avoid freeze / thaw cycles.
Database Links	HGNC:18884OMIM:607198Reactome:R-HSA-5693571
Alternative Names	Tyrosyl-DNA phosphodiesterase 1 Tyr-DNA phosphodiesterase 1
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 Localization	Nucleus
Post-translational Modifications	Phosphorylated on serine and/or threonine residues, but not on tyrosine residues,