ARG52443
anti-TDP43 antibody

Package: 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes TDP43
Tested Reactivity	Hu, Rat
Tested Application	IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	TDP43
Species	Human
Immunogen	Synthetic peptide C-terminal to the caspase-cleavage site (between D219 and V220) of human TDP-43.
Conjugation	Un-conjugated
Alternate Names	TAR DNA-binding protein 43; TDP-43; ALS10

Application Instructions

Application table

Application	Dilution
IHC-P	1:250
WB	1:1000

Application Note

Specific for the ~ 43kDa TDP-43 protein in Western blots of Rat brain lysate. Expected molecular weight is dependent upon the TDP-43 species present in sample (full-length vs. truncated TDP-43). Under non-denaturing conditions (for example, by IHC), this antibody detects TDP-43 inclusions in human brain tissue with TDP-43 proteinopathy, but does not detect full-length nuclear TDP-43. Under denaturing conditions (for example, by Western Blot analysis) this antibody detects the C-terminus of full-length and truncated human TDP-43.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

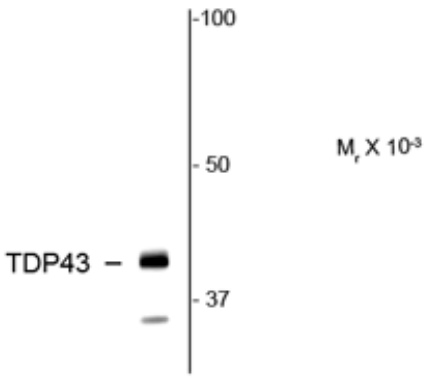
Properties

Form	Liquid
Purification	Affinity Purified
Buffer	PBS and 30% Glycerol
Stabilizer	30% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 23435 Human Swiss-port # Q13148 Human
Gene Symbol	TARDBP
Gene Full Name	TAR DNA binding protein
Background	TDP43 (Tar DNA Binding 43, TARDBP) was originally identified as a protein which binds to the "transactivation response" (TAR) sequence found in the long terminal repeat of the HIV-1 virus genome (Ou et al.,1995). UV cross-linking of HeLa cell extract revealed a 43kDa protein which was cloned and sequenced and shown to contain two copies of the ~90 amino acid RRM domain. RRM is an acronym for RNA Recognition Motif, and this domain is found in many proteins which bind single stranded RNA and some which bind single stranded DNA. Northern blots showed that the protein is ubiquitous in tissue expression. Much interest has been focused on TDP43 recently due to its association with the inclusions seen in frontotemporal lobar degeneration and Amyotrophic Lateral Sclerosis (Neumann et al., 2006). The protein is present in these inclusions in partially degraded, hyperphosphorylated and ubiquitinated forms.
Research Area	Gene Regulation antibody; Microbiology and Infectious Disease antibody; Neuroscience antibody
Calculated Mw	45 kDa
PTM	Hyperphosphorylated in hippocampus, neocortex, and spinal cord from individuals affected with ALS and FTLDU. Ubiquitinated in hippocampus, neocortex, and spinal cord from individuals affected with ALS and FTLDU. Cleaved to generate C-terminal fragments in hippocampus, neocortex, and spinal cord from individuals affected with ALS and FTLDU.

Images



ARG52443 anti-TDP43 antibody WB image

Western blot: Rat hippocampal lysate showing specific immunolabeling of the ~58k TR-α2 protein stained with ARG52443 anti-TDP43 antibody.