

Rabbit Anti-TDRD3 antibody

SL11768R

Product Name:	TDRD3
Chinese Name:	Tudor结构域蛋白TDRD3抗体
Alias:	TDRD 3; tdrd3; TDRD3_HUMAN; Tudor domain containing 3; Tudor domain containing protein 3; Tudor domain-containing protein 3; 4732418C03Rik; 6720468N18; FLJ21007; OTTHUMP00000018485.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Pig, Horse, Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	73kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human TDRD3:161-250/651
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	Tudor domain containing 3 is a 651 amino acid protein that localizes to both the nucleus and the cytoplasm and contains one UBA domain and one tudor domain. Expressed in lung, brain, heart, liver, placenta, kidney, pancreas and skeletal muscle, TDRD3 exists as a component of mRNA stress granules and is thought to play a role in the translation of target mRNAs, as well as in the assembly and disassembly of stress granules. Multiple

isoforms of TDRD3 exist due to alternative splicing events. The gene encoding TDRD3 maps to human chromosome 13, which houses over 400 genes, such as BRCA2 and RB1, and comprises nearly 4% of the human genome. Trisomy 13, also known as Patau syndrome, is deadly and the few who survive past one year suffer from permanent neurologic defects, difficulty eating and vulnerability to serious respiratory infections.

Function:

Scaffolding protein that specifically recognizes and binds dimethylarginine-containing proteins. In nucleus, acts as a coactivator: recognizes and binds asymmetric dimethylation on the core histone tails associated with transcriptional activation (H3R17me2a and H4R3me2a) and recruits proteins at these arginine-methylated loci. In cytoplasm, may play a role in the assembly and/or disassembly of mRNA stress granules and in the regulation of translation of target mRNAs by binding Arg/Gly-rich motifs (GAR) in dimethylarginine-containing proteins.

Subunit:

Component of mRNA stress granules. Interacts with FMR1, FXR1, FXR2, EWSR1, FUS, SERBP1, EEF1A1 and DDX3X or DDX3Y, and with the small nuclear ribonucleoprotein-associated proteins SNRPB and SNRPN. Interacts with 'Lys-48'-linked tetra-ubiquitin, but not with monoubiquitin or 'Lys-63'-linked ubiquitin chains.

Subcellular Location:

Cytoplasm. Nucleus. Predominantly cytoplasmic. Associated with actively translating polyribosomes and with mRNA stress granules.

Tissue Specificity:

Detected in heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas.

Similarity:

Contains 1 Tudor domain.

Contains 1 UBA domain.

SWISS:

O9H7E2

Gene ID:

81550

Database links:

Entrez Gene: 418823Chicken

Entrez Gene: 452750Chimpanzee

Entrez Gene: 537918Cow

Entrez Gene: 81550Human

Entrez Gene: 219249Mouse

Entrez Gene: 306066Rat

Entrez Gene: 431810 Xenopus laevis

Entrez Gene: 395019Xenopus tropicalis

Omim: 614392Human

SwissProt: Q5ZMS6Chicken

SwissProt: Q2HJG4Cow

SwissProt: Q9H7E2Human

SwissProt: Q91W18Mouse

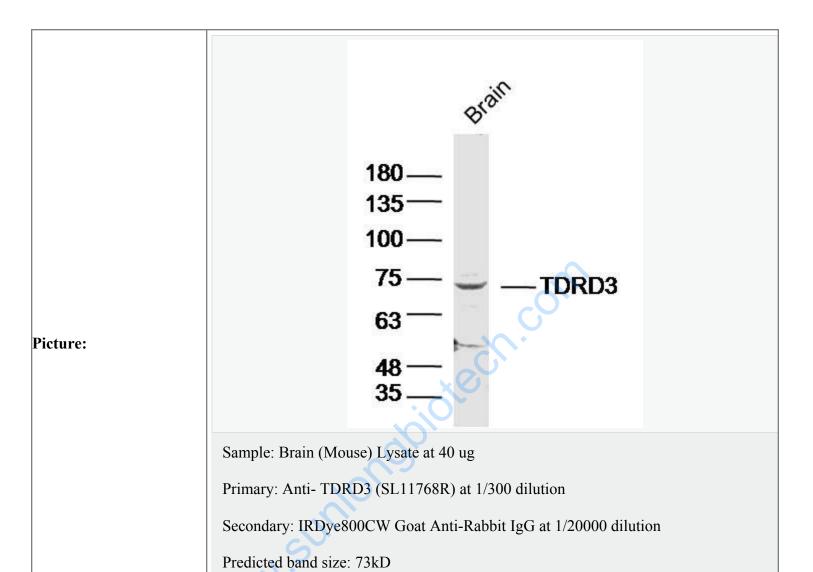
SwissProt: Q66HC1Rat

SwissProt: Q6NRP6Xenopus laevis

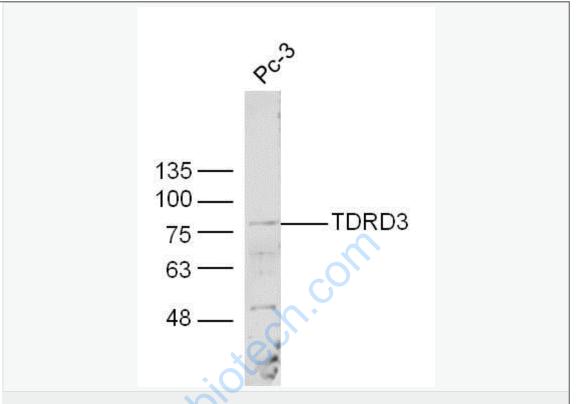
SwissProt: Q6P1U3Xenopus tropicalis

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



Observed band size: 73kD



Sample:

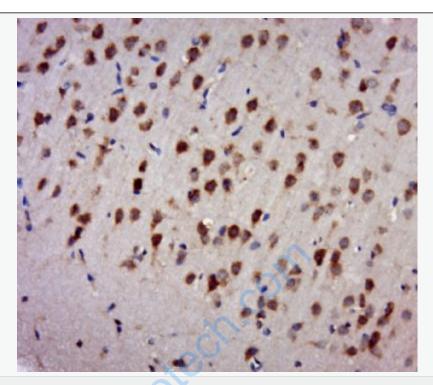
pc-3 Cell (Human) Lysate at 30 ug

Primary: Anti-TDRD3 (SL11768R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 73 kD

Observed band size: 77 kD



Paraformaldehyde-fixed, paraffin embedded (rat brain tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (TDRD3) Polyclonal Antibody, Unconjugated (SL11768R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.