

TYW4 Antibody
Catalog # ASC11336**Specification**

TYW4 Antibody - Product Information

Application	WB, IHC-P, IF, E
Primary Accession	O60294
Other Accession	NP_055608 , 25188199
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Application Notes	TYW4 antibody can be used for detection of TYW4 by Western blot at 1 µg/mL. Antibody can also be used for immunohistochemistry starting at 5 µg/mL. For immunofluorescence start at 20 µg/mL.

TYW4 Antibody - Additional InformationGene ID **9836****Target/Specificity**

LCMT2; TYW4 antibody is predicted to not cross-react with other TYW protein family members. At least two isoforms of TYW4 are known to exist; this antibody will detect only the long isoform.

Reconstitution & Storage

TYW4 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions

TYW4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

TYW4 Antibody - Protein Information**Name** LCMT2**Synonyms** KIAA0547, TYW4**Function**

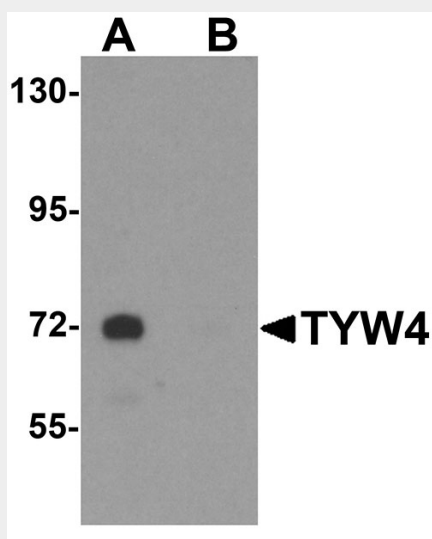
Probable S-adenosyl-L-methionine-dependent methyltransferase that acts as a component of the wybutosine biosynthesis pathway. Wybutosine is a hyper modified guanosine with a tricyclic base found at the 3'-position adjacent to the anticodon of eukaryotic phenylalanine tRNA (By similarity). May methylate the carboxyl group of leucine residues to form alpha-leucine ester residues.

TYW4 Antibody - Protocols

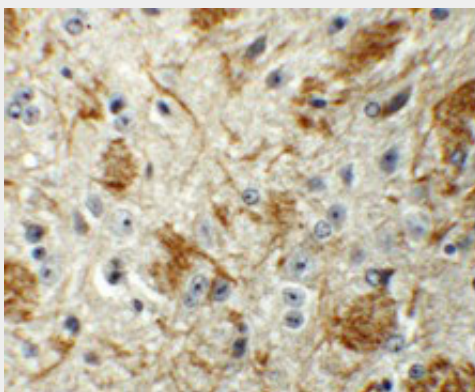
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

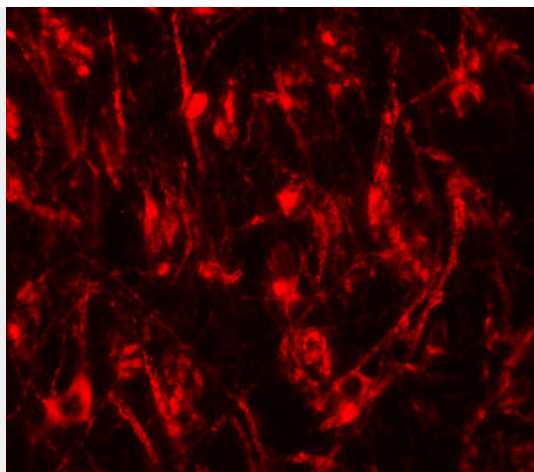
TYW4 Antibody - Images



Western blot analysis of TYW4 in rat brain tissue lysate with TYW4 antibody at 1 $\mu\text{g/mL}$ in (A) the absence and (B) the presence of blocking peptide.



Immunohistochemistry of TYW4 in mouse brain tissue with TYW4 antibody at 5 $\mu\text{g/mL}$.



Immunofluorescence of TYW1 in mouse brain tissue with TYW1 antibody at 20 μ g/mL.

TYW4 Antibody - Background

TYW4 Antibody: TYW4 is an enzyme that participates in the wybutosine-tRNA (Phe) biosynthesis pathway. Wybutosine (yW) is a hypermodified guanosine at the 3-prime position adjacent to the anticodon of phenylalanine tRNA that stabilizes codon-anticodon interactions during decoding on the ribosome. TYW4 is involved in a multistep enzymatic reaction that stabilizes codon-anticodon base-pairing during the ribosomal decoding process, thereby ensuring correct translation.

TYW4 Antibody - References

Noma A and Suzuki T. Ribonucleome analysis identified enzyme genes responsible for wybutosine synthesis. Nucleic Acids Symp. Ser. (Oxf) 2006; 65-6.

Noma A, Kirino Y, Ikeuchi Y, et al. Biosynthesis of wybutosine, a hyper-modified nucleoside in eukaryotic phenylalanine tRNA. EMBO J. 2006; 25:2142-54.