Datasheet for 600-401-FT2

TYW1 Antibody

Overview

Description:	Anti-TYW1 (RABBIT) Antibody - 600-401-FT2
Item No.:	600-401-FT2
Size:	100 µg
Applications:	ELISA, IHC, WB
Reactivity:	Human, Rat
Host Species:	Rabbit

Product Details

Background:	TYW1, also known as TYW1A, RSAFD1 or YPL207W, is a 732 amino acid protein containing one flavodoxin-like domain 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. TYW1 is involved in a multistep enzymatic reaction that stabilizes codon-anticodon base-pairing during the ribosomal decoding process, thereby ensuring correct translation. TYW1 binds to one 4Fe-4S cluster and is located on human chromosome 7. Defects in some of the genes on chromosome 7 have been linked to Osteogenesis imperfecta, Williams-Beuren syndrome, Lissencephaly, Citrullinemia and Shwachman-Diamond syndrome, suggesting that TYW1 may play a role in these conditions
Synonyms:	TYW1 Antibody, TYW1A, RSAFD1, YPL207W, S-adenosyl-L-methionine-dependent tRNA 4-demethylwyosine synthase, Radical S-adenosyl methionine and flavodoxin domain-containing protein 1
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	TYW1
Reactivity:	Human, Rat

Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-TYW1 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 19 amino acid synthetic peptide near the C-terminus of human TYW1.
Purity/Specificity:	Anti-TYW1 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. TYW1 antibody is predicted to not cross-react with other TYW protein family members. At least three isoforms of TYW1 are known to exist; this antibody will only detect the two larger isoforms.
Relevant Links:	• UniProtKB - Q9NV66 • GeneID - 55253 • NCBI - NP_060734.2

Application Details

Tested Applications:	ELISA, IHC, WB
Application Note:	Anti-TYW1 Antibody has been tested for use in ELISA, Western Blotting, and Immunohistochemistry. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 84 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000
IHC:	5 µg/mL
WB:	1 µg/mL

Formulation

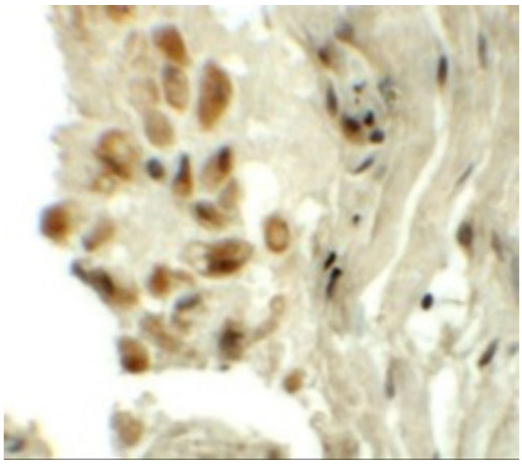
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

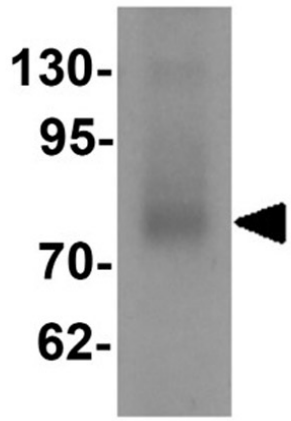
Shipping Condition:	Dry Ice

Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Immunohistochemistry
Immunohistochemistry of TYW1.
Tissue: human lung tissue.
Primary Antibody: TYW1 antibody at 5 µg/mL.



Western Blot
Western blot analysis of TYW1.
Load: human lung tissue lysate.
Primary Antibody: TYW1 antibody at 1 µg/mL.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.