

Datasheet for 600-401-FT3**TYW2 Antibody****Overview**

Description:	Anti-TYW2 (RABBIT) Antibody - 600-401-FT3
Item No.:	600-401-FT3
Size:	100 µg
Applications:	ELISA, IHC, WB
Reactivity:	Human, Mouse
Host Species:	Rabbit

Product Details

Background:	TYW2, also known as TRM12, 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. TYW2 is involved in a multistep enzymatic reaction that stabilizes codon-anticodon base-pairing during the ribosomal decoding process, thereby ensuring correct translation. TYW2 was found to be amplified in 7 of 8 breast cancers cell lines analyzed, and qPCR analysis of 30 breast tumors showed overexpression of TYW2 mRNA of over 2-fold in 26, suggesting that TYW2 may play a role in breast cancer.
Synonyms:	TYW2 Antibody, TYW2, TRM12, TYW2, tRNA wybutosine-synthesizing protein 2 homolog, Alpha-amino-alpha-carboxypropyl transferase TYW2, tRNA-yW-synthesizing protein 2
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	TRMT12
Reactivity:	Human, Mouse
Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-TYW2 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 19 amino acid synthetic peptide near the N-terminus of human TYW2.

Purity/Specificity:	Anti-TYW2 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. TYW2 antibody is predicted to not cross-react with other TYW protein family members. At least two isoforms of TYW2 are known to exist; this antibody will detect both isoforms
Relevant Links:	• UniProtKB - Q53H54 • GeneID - 55039 • NCBI - NP_060426.2

Application Details

Tested Applications:	ELISA, IHC, WB
Application Note:	Anti-TYW2 Antibody has been tested for use in ELISA, Western Blotting, Immunocytochemistry. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 50 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:	1:5,000
WB:	0.5 µg/mL

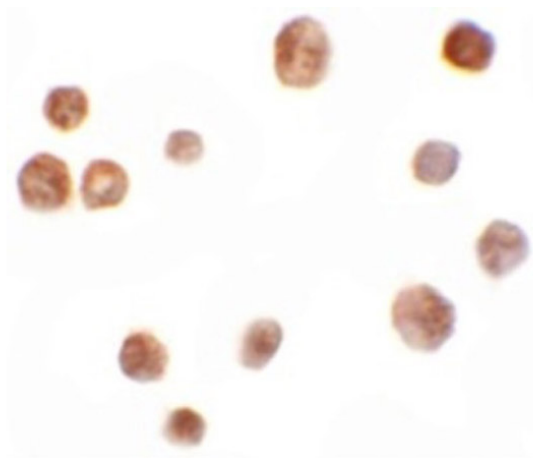
Formulation

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

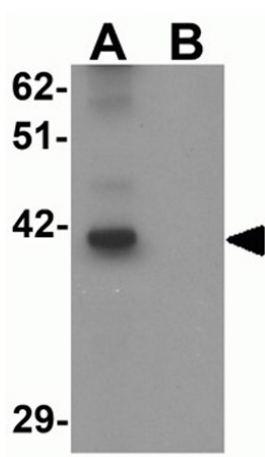


Immunocytochemistry

Immunocytochemistry of TYW2.

Cell: K562 cells.

Primary Antibody: TYW2 antibody at 10 µg/mL.



Western Blot

Western blot analysis of TYW2.

Load: K562 cell lysate.

Primary Antibody: TYW2 antibody at 0.5 µg/mL in (A) the absence and (B) the presence of blocking peptide.

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.