

**Datasheet for 600-401-DR1****POFUT1 Antibody****Overview**

|                      |                                             |
|----------------------|---------------------------------------------|
| <b>Description:</b>  | Anti-POFUT1 (RABBIT) Antibody - 600-401-DR1 |
| <b>Item No.:</b>     | 600-401-DR1                                 |
| <b>Size:</b>         | 100 µg                                      |
| <b>Applications:</b> | ELISA, IHC, WB                              |
| <b>Reactivity:</b>   | Human, Mouse                                |
| <b>Host Species:</b> | Rabbit                                      |

**Product Details**

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Background:</b>   | POFUT1, an endoplasmic reticulum-residing member of the glycosyltransferase O-Fuc family, adds O-fucose through an O-glycosidic linkage to conserved serine or threonines in epidermal growth factor-like repeats of several cell surface and secreted proteins. Unlike its homolog POFUT2, POFUT1 can also catalyze the transfer of fucose to thrombospondin type 1 repeats. Many of the substrates of POFUT1 are involved in ligand-induced receptor signaling. One such protein is Notch; mouse ES cells lacking POFUT have normal levels of Notch receptors at the cell surface, but these receptors do not bind Notch ligands or exhibit Notch signaling. |
| <b>Synonyms:</b>     | POFUT1 Antibody, DDD2, FUT12, O-FUT, OFUCT1, O-Fuc-T, O-FucT-1, KIAA0180, GDP-fucose protein O-fucosyltransferase 1, Peptide-O-fucosyltransferase 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Host Species:</b> | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Clonality:</b>    | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Format:</b>       | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

**Target Details**

|                        |                                                                                                                                                                               |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name:</b>      | POFUT1                                                                                                                                                                        |
| <b>Reactivity:</b>     | Human, Mouse                                                                                                                                                                  |
| <b>Immunogen Type:</b> | Conjugated Peptide                                                                                                                                                            |
| <b>Immunogen:</b>      | Anti-POFUT1 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 16 amino acid synthetic peptide from near the N-terminus of human POFUT1. |

|                            |                                                                                                                                                                                                                         |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Purity/Specificity:</b> | Anti-POFUT1 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. At least two isoforms of POFUT1 are known to exist. This antibody is predicted to not cross-react with POFUT2. |
| <b>Relevant Links:</b>     | <ul style="list-style-type: none"><li>• <a href="#">UniProtKB - Q9H488</a></li><li>• <a href="#">GeneID - 23509</a></li><li>• <a href="#">NCBI - NP_056167</a></li></ul>                                                |

## Application Details

|                             |                                                                                                                                                                                                                                                                         |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Tested Applications:</b> | ELISA, IHC, WB                                                                                                                                                                                                                                                          |
| <b>Application Note:</b>    | Anti-POFUT1 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 44 kDa in Western Blots of specific cell lysates and tissues. |
| <b>Assay Dilutions:</b>     | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.                                                                                                                                                                         |
| <b>ELISA:</b>               | 1:5,000 - 1:10,000                                                                                                                                                                                                                                                      |
| <b>IHC:</b>                 | 2.5 µg/mL                                                                                                                                                                                                                                                               |
| <b>WB:</b>                  | .5-1 µg/mL                                                                                                                                                                                                                                                              |

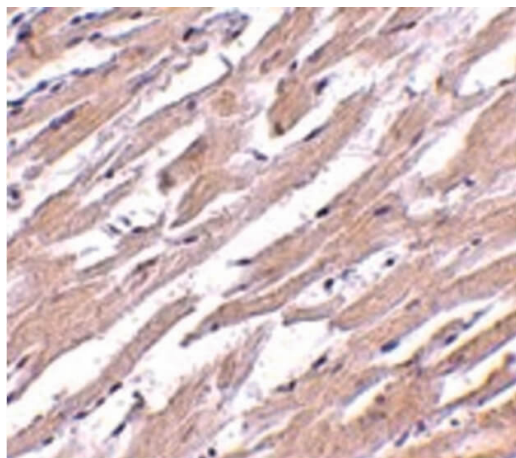
## Formulation

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

## Shipping & Handling

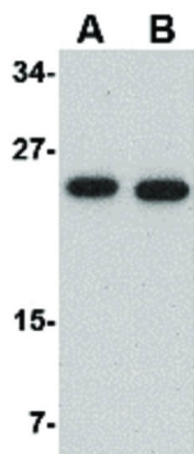
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|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Shipping Condition:</b> | Dry Ice                                                                                                                                                                                                                                                                                                                                       |
| <b>Storage Condition:</b>  | 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. |
| <b>Expiration:</b>         | Expiration date is one (1) year from date of receipt.                                                                                                                                                                                                                                                                                         |

## Images



### Immunohistochemistry

Immunohistochemistry of POFUT1 antibody. Tissue: Human heart tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: POFUT1 antibody at 2.5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: POFUT1 is nuclear and occasionally cytoplasmic. Staining: POFUT1 as a precipitated red signal with hematoxylin purple nuclear counterstain.



### Western Blot

Western Blot of POFUT1 antibody. Lane A: Human heart tissue lysate at 0.5 µg/mL. Lane B: Human heart tissue lysate at 1 µg/mL. Load: 35 µg per lane. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 22.3 kDa, ~25 kDa for POFUT1.

## 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.