

**Datasheet for 600-401-GT3****Orf2 Antibody****Overview**

|                      |                                           |
|----------------------|-------------------------------------------|
| <b>Description:</b>  | Anti-Orf2 (RABBIT) Antibody - 600-401-GT3 |
| <b>Item No.:</b>     | 600-401-GT3                               |
| <b>Size:</b>         | 100 µg                                    |
| <b>Applications:</b> | ELISA, WB                                 |
| <b>Reactivity:</b>   | Mouse                                     |
| <b>Host Species:</b> | Rabbit                                    |

**Product Details**

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Background:</b>   | Anti-Orf2 Antibody was designed, produced, and validated as part of the Joy Cappel Young Investigator Award (JCYIA). The multi-functional nuclear protein ORF2p is involved in reverse transcriptase and endonuclease processes. ORF2 elements are epigenetically silenced throughout embryonic development and it is suggested that mutations of L1 would result in detrimental de novo insertions into the genome, negatively affecting gene expression. L1 elements are critical components in the mammalian genome, and much is still not known regarding these proteins. Studies implicate that line-1 is activated in fetal oocytes and L1ORF2p may contribute to the eradication or selection of the oocytes. |
| <b>Synonyms:</b>     | Rabbit Anti-Orf2 Antibody, Endonuclease reverse transcriptase, LINE-1 retrotransposable element ORF2 protein, Line1 protein, Orf2p, retrovirus-related Pol polyprotein LINE-1, Long interspersed element-1, L1, Orf-2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Host Species:</b> | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Clonality:</b>    | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Format:</b>       | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

**Target Details**

|                        |                    |
|------------------------|--------------------|
| <b>Gene Name:</b>      | Pol                |
| <b>Reactivity:</b>     | Mouse              |
| <b>Immunogen Type:</b> | Conjugated Peptide |

|                            |                                                                                                                                                                                                                                                                                                                                                 |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Immunogen:</b>          | Affinity purified Anti-ORF2 antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide near the c-terminus of mouse ORF2 protein.                                                                                                                                                                |
| <b>Purity/Specificity:</b> | Anti-Orf2 is directed against mouse ORF2 near a c-terminus position. This product is an affinity purified antibody produced by immunoaffinity chromatography using peptide coupled to agarose beads. A BLAST analysis was used to suggest reactivity with this protein from human and feline based on 100% homology for the immunogen sequence. |
| <b>Relevant Links:</b>     | <ul style="list-style-type: none"><li>• <a href="#">UniProtKB - P11369</a></li><li>• <a href="#">NCBI - AAC53542.1</a></li><li>• <a href="#">GENEID - 2731767</a></li></ul>                                                                                                                                                                     |

## Application Details

|                             |                                                                                                                                                                                                                                                                           |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Tested Applications:</b> | ELISA, WB                                                                                                                                                                                                                                                                 |
| <b>Application Note:</b>    | This affinity purified antibody has been tested for use in ELISA and Western Blot. Specific conditions for reactivity should be optimized by the end user. Expect a band ~150 kDa in size corresponding to Orf2 by western blotting in the liver cell lysates or extract. |
| <b>Assay Dilutions:</b>     | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.                                                                                                                                                                           |
| <b>ELISA:</b>               | 1.0 ug/ul                                                                                                                                                                                                                                                                 |
| <b>WB:</b>                  | 1.0 ug/ml                                                                                                                                                                                                                                                                 |

## Formulation

|                        |                                                            |
|------------------------|------------------------------------------------------------|
| <b>Physical State:</b> | Liquid (sterile filtered)                                  |
| <b>Concentration:</b>  | 1.07 mg/mL by UV absorbance at 280 nm                      |
| <b>Buffer:</b>         | 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 |
| <b>Preservative:</b>   | 0.01% (w/v) Sodium Azide                                   |
| <b>Stabilizer:</b>     | None                                                       |

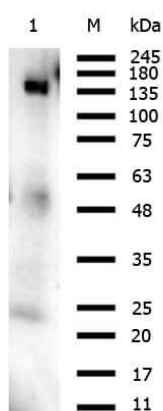
## Shipping & Handling

|                            |         |
|----------------------------|---------|
| <b>Shipping Condition:</b> | 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



### Western Blot

Western Blot of Rabbit Anti-Orf2 antibody. Lane 1: Mouse liver whole cell lysate (W10-000-T020). Load: 10 µg per lane. Primary antibody: Orf2 antibody at 1.0 µg/mL for overnight at 4°C. Secondary antibody: Gt-a-Rb HRP (p/n 611-103-122) at 1:40,000 for 30 min at RT. Block: MB-070 overnight at 4°C. Predicted/Observed size: 150 kDa for Orf2.

## 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.