

## Datasheet for 600-401-J20

**HDAC4 (internal) Antibody****Overview**

|                      |  |
|----------------------|--|
| <b>Description:</b>  | Anti-HDAC4 (RABBIT) Antibody - 600-401-J20 |
| <b>Item No.:</b>     | 600-401-J20                                |
| <b>Size:</b>         | 100 µg                                     |
| <b>Applications:</b> | WB   |
| <b>Reactivity:</b>   | Human, Mouse, Rat, Primate                 |
| <b>Host Species:</b> | Rabbit                                     |

**Product Details**

|                      |  |
|----------------------|--|
| <b>Background:</b>   | HDAC4 is a 140 kD class II histone deacetylase similar to the yeast HDA1 protein. This nuclear protein operates in concert with histone acetyltransferases to control core histone acetylation in highly conserved lysine residues. HDAC activity has been associated with transcriptional repression and nucleosomal condensation. HDAC4 uses active nuclear export to shuttle between the nucleus and the cytoplasm. HDAC4 is modified by phosphorylation by CaM kinase I or IV. HDAC4 has been reported to interact with 14-3-3 in the cytoplasm and MEF2A, HDAC3, NcoR and SMRT in the nucleus. Anti-HDAC4 antibodies are ideal for researchers interested in Breast Cancer, Cancer, Cell Cycle and Replication, Chromatin Research, Epigenetics, and Histone Deacetylases research. |
| <b>Synonyms:</b>     | rabbit anti-HDAC-4 antibody, HDAC4, HDAC 4, HD 4 antibody, histone deacetylase 4 antibody, Histone deacetylase-4, HD4 antibody   |
| <b>Host Species:</b> | Rabbit   |
| <b>Clonality:</b>    | Polyclonal   |
| <b>Format:</b>       | IgG  |

**Target Details**

|                        |                            |
|------------------------|----------------------------|
| <b>Gene Name:</b>      | HDAC4                      |
| <b>Reactivity:</b>     | Human, Mouse, Rat, Primate |
| <b>Immunogen Type:</b> | Conjugated Peptide         |

|                            |  |
|----------------------------|--|
| <b>Immunogen:</b>          | HDAC4 affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to the internal region surrounding 600-650aa of human HDAC4.   |
| <b>Purity/Specificity:</b> | Anti-HDAC4 was affinity purified from monospecific antiserum by immunoaffinity chromatography. This antibody is specific towards HDAC4. A BLAST analysis was used to suggest cross-reactivity with Human, Mouse, Rat, and Primate based on 100% sequence homology. Cross-reactivity with HDAC4 from other sources has not been determined. |
| <b>Relevant Links:</b>     | <ul style="list-style-type: none"><li>• <a href="#">UniProtKB - P56524</a></li><li>• <a href="#">NCBI - NP_006028.2</a></li><li>• <a href="#">GenelD - 9759</a></li></ul>  |

## Application Details

|                             |   |
|-----------------------------|---|
| <b>Tested Applications:</b> | WB  |
| <b>Application Note:</b>    | Anti-HDAC4 antibody has been tested in Western Blot and is useful for ELISA and immunohistochemistry. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately ~140 kDa corresponding to the appropriate cell lysate 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>               | 1:20,000 - 1:60,000   |
| <b>IF:</b>                  | 1:100-1:500   |
| <b>IHC:</b>                 | 1 mg/mL   |
| <b>WB:</b>                  | 1 mg/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>         | 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 |
| <b>Stabilizer:</b>     | 50% (v/v) Glycerol   |

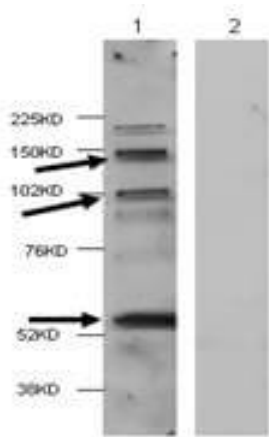
## Shipping & Handling

|                            |         |
|----------------------------|---------|
| <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 six (6) months from date of receipt.

## Images



### Western Blot

Western Blot of Rabbit anti-HDAC4 antibody. Lane 1: Mouse brain homogenate. Lane 2: Mouse brain homogenate blocked with peptide. Load: 30 µg per lane. Primary antibody: HDAC4 antibody at 1:400 for overnight at 4°C. Secondary antibody: IRDye800™ rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 140 kDa, 98 kDa, and 55 kDa for HDAC4. Other band(s): HDAC4 splice variants and isoforms.

## 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.