

**Datasheet for 600-401-A94S****KSHV ORF57 Antibody****Overview**

|                      |                                                  |
|----------------------|--------------------------------------------------|
| <b>Description:</b>  | Anti-KSHV ORF57 (RABBIT) Antibody - 600-401-A94S |
| <b>Item No.:</b>     | 600-401-A94S                                     |
| <b>Size:</b>         | 25 µL                                            |
| <b>Applications:</b> | ELISA, WB                                        |
| <b>Reactivity:</b>   | Human                                            |
| <b>Host Species:</b> | Rabbit                                           |

**Product Details****Background:**

This antibody is designed, produced, and validated as part of a collaboration between Rockland and the National Cancer Institute (NCI) and is suitable for Cancer, Immunology and Nuclear Signaling research. ORF57 (also known as MTA), one of the earliest Kaposi's sarcoma-associated herpesvirus (KSHV) regulatory proteins to be expressed, is essential for virus lytic replication. A counterpart is present in every herpesvirus sequenced, indicating the importance of this signature viral protein, and those examined act post-transcriptionally, affecting RNA splicing and transport. KSHV ORF57 is capable of establishing both lytic and latent replication cycles. In KS, the virus localizes to tumor progenitor endothelial cells, most of which are latently infected. In cell culture, KSHV replication is generally studied using B-cell lines, such as BCBL-1, generated from primary effusion lymphoma material. Most BCBL-1 cells are latently infected, although there is some spontaneous virus reactivation. Addition of chemical inducers such as sodium n-butyrate, 12-O-tetradecanoylphorbol-13-acetate (TPA), and valproic acid (VA) to these cells efficiently induces the lytic cycle and produces virions. KSHV ORF57 protein predominantly localizes to the nucleus and can shuttle between the nucleus and cytoplasm. Most HSV-1 genes are unspliced; by contrast, ORF57 is spliced gene; the protein is 455 amino acids in length and 50kDa in size.

|                      |                                                                   |
|----------------------|-------------------------------------------------------------------|
| <b>Synonyms:</b>     | rabbit anti-KSHV ORF57 antibody, MTA, human herpesvirus 8 protein |
| <b>Host Species:</b> | Rabbit                                                            |
| <b>Clonality:</b>    | Polyclonal                                                        |
| <b>Format:</b>       | IgG                                                               |

**Target Details**

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name:</b>          | ORF57                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Reactivity:</b>         | Human                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Immunogen Type:</b>     | Conjugated Peptide                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Immunogen:</b>          | This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to a region near the C-terminal of human KSHV ORF57 protein.                                                                                                                                                                                                                            |
| <b>Purity/Specificity:</b> | This affinity purified antibody is directed against human herpesvirus 8 (KSHV ORF57) protein. The product was affinity purified from monospecific antiserum by immunoaffinity chromatography. A BLAST analysis was used to suggest cross-reactivity with ORF57 protein from human herpesvirus 8 types P and M sources based on 94% homology with the immunizing sequence. Reactivity against homologues from other sources is unknown. |
| <b>Relevant Links:</b>     | <ul style="list-style-type: none"><li>• <a href="#">UniProtKB - Q2HR75</a></li><li>• <a href="#">NCBI - YP_001129410.1</a></li><li>• <a href="#">GenelD - 4961525</a></li></ul>                                                                                                                                                                                                                                                        |

## Application Details

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|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Tested Applications:</b> | ELISA, WB                                                                                                                                                                                                                                                                                         |
| <b>Application Note:</b>    | This affinity purified antibody has been tested for use in ELISA and western blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band 50-55 kDa in size corresponding to KSHV ORF57 protein by western blotting in 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>               | 1:100,000 – 170,000                                                                                                                                                                                                                                                                               |
| <b>IHC:</b>                 | User Optimized                                                                                                                                                                                                                                                                                    |
| <b>WB:</b>                  | 1:5,000 - 1:8,000                                                                                                                                                                                                                                                                                 |

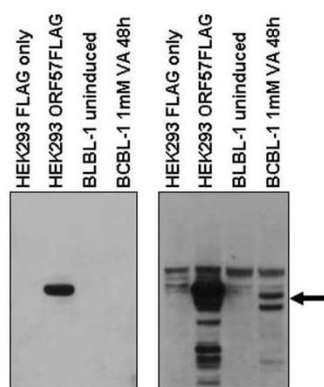
## Formulation

|                        |                                                            |
|------------------------|------------------------------------------------------------|
| <b>Physical State:</b> | Liquid (sterile filtered)                                  |
| <b>Concentration:</b>  | 1.55 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Storage Condition:</b>  | Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing. |
| <b>Expiration:</b>         | Expiration date is three (3) months from date of receipt.                                                                                                                                                                                                                                                                                                                                                                                                                                          |

## Images



### Western Blot

Western blot using Rockland's affinity purified anti-KSHV ORF57 to detect KSHV ORF57 in HEK293 cells transfected with ORF57 expression vector and ORF57 truncations, or in KSHV infected B-cell line (BCBL-1) treated with or without valproic acid to induce viral replication (arrow). The membrane was probed with the primary antibody diluted 1:7,500 (left) and 1:1,000 (right). Personal Communication, V. Majerciak, M.Zheng, CCR-NCI, Bethesda, MD.

## References

- Majerciak V et al. A KSHV RNA-binding protein promotes FOS to inhibit nuclease AEN and transactivate RGS2 for AKT phosphorylation. *mBio*. (2025)

## 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.