

# Product Datasheet

## **alpha-Smooth Muscle Actin Antibody (1A4 + ACTA2/791)** **[Alexa Fluor® 647]** **NBP2-47699AF647**

Unit Size: 0.1 ml

Store at 4C in the dark.

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**NBP2-47699AF647**

alpha-Smooth Muscle Actin Antibody (1A4 + ACTA2/791) [Alexa Fluor® 647]

| Product Information     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Unit Size               | 0.1 ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Concentration           | Please see the vial label for concentration. If unlisted please contact technical services.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Storage                 | Store at 4C in the dark.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Clonality               | Monoclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Clone                   | 1A4 + ACTA2/791                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Preservative            | 0.05% Sodium Azide                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Isotype                 | IgG2a Kappa/IgG2a Kappa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Conjugate               | Alexa Fluor 647                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Purity                  | Protein A or G purified                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Buffer                  | 50mM Sodium Borate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Product Description     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Host                    | Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Gene ID                 | 59                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Gene Symbol             | ACTA2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Species                 | Human, Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Reactivity Notes        | Predicted to show a broad reactivity.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Marker                  | Leiomyosarcoma Marker                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Specificity/Sensitivity | Actin is a major component of the cytoskeleton and is present in most cell types. It is highly specific to actin from smooth muscles. This monoclonal antibody does not stain cardiac or skeletal muscle; however, it does stain myofibroblasts and myoepithelial cells. This antibody could be used together with anti-muscle specific actin and myogenin in making a diagnosis of smooth muscle and skeletal muscle tumors. In most cases of rhabdomyosarcoma, this antibody yields negative results whereas anti-muscle specific actin and myogenin are positive. Leiomyosarcomas are positive only with anti-muscle specific actin and anti-smooth muscle actin and are negative with anti-myogenin. |
| Immunogen               | N-Terminal decapeptide of alpha-Smooth Muscle Actin and conjugated to KLH (1A4); Recombinant full-length human ACTA2 protein (ACTA2/791) (Uniprot: P62736)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |



|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
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| <b>Product Application Details</b> |                                                                                                                                               |
|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Applications</b>                | Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin, CyTOF-ready, Immunofluorescence |
| <b>Recommended Dilutions</b>       | Flow Cytometry, Immunohistochemistry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry-Paraffin, Immunofluorescence, CyTOF-ready |
| <b>Application Notes</b>           | Optimal dilution of this antibody should be experimentally determined.                                                                        |

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**Products Related to NBP2-47699AF647**

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|                    |                                                                  |
|--------------------|------------------------------------------------------------------|
| H00000059-P01-10ug | Recombinant Human alpha-Smooth Muscle Actin GST (N-Term) Protein |
| DVE00              | VEGF [HRP]                                                       |
| NBP2-66429         | Mouse alpha-Smooth Muscle Actin ELISA Kit (Colorimetric)         |
| 233-FB-025         | FGF basic/FGF2/bFGF [Unconjugated]                               |

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**Limitations**

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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