

# Product Datasheet

## **alpha-Smooth Muscle Actin Antibody (1A4 + ACTA2/791) [PE/Cy5.5] NBP2-47699PECY55**

Unit Size: 0.1 ml

Store at 4C in the dark. Do not freeze.

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Updated 9/11/2024 v.20.1

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**NBP2-47699PECY55**

alpha-Smooth Muscle Actin Antibody (1A4 + ACTA2/791) [PE/Cy5.5]

| 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. Do not freeze.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Clonality                   | Monoclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Clone                       | 1A4 + ACTA2/791                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Preservative                | 0.05% Sodium Azide                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Isotype                     | IgG2a Kappa/IgG2a Kappa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Conjugate                   | PE/Cy5.5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Purity                      | Protein A or G purified                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Buffer                      | PBS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 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)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Product Application Details |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Applications                | Flow Cytometry                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Recommended Dilutions       | Flow Cytometry                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Application Notes           | Optimal dilution of this antibody should be experimentally determined. For optimal results using our Tandem dyes, please avoid prolonged exposure to light or extreme temperature fluctuations. These can lead to irreversible degradation or decoupling. When staining intracellular targets, specific attention to the fixation and permeabilization steps in your flow protocol may be required. Please contact our technical support team at <a href="mailto:technical@novusbio.com">technical@novusbio.com</a> if you have any questions.                                                                                                                                                           |





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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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