**Qty:** 100µg/400 µL

Rabbit anti-Sprouty-1

**Catalog No.** 40-1800

**Lot No.**

# Rabbit anti-Sprouty-1

## FORM
This polyclonal antibody is supplied as a 400 µL aliquot at a concentration of 0.25 mg/mL in phosphate buffered saline (pH 7.4) containing 0.1% sodium azide. This antibody is epitope-affinity purified from rabbit antiserum.

**PAD:** ZMD.435

## IMMUNOGEN
Synthetic peptide derived from the N-terminal region of mouse and rat Sprouty-1

## SPECIFICITY
This antibody reacts with the ~34 kDa mouse Sprouty-1. A band of unknown origin was observed at ~120 kDa.

## REACTIVITY
Reactivity has been confirmed with two day-old mouse kidney homogenates.

| Sample | Western Blotting | Immunoprecipitation |
|---|---|---|
| Mouse | +++ | 0* |
| Rat | ND | ND |

(Excellent +++, Good++, Poor +, No reactivity 0, Not applicable N/A, Not Determined ND)
*No reactivity observed under conditions tested.

## USAGE
Working concentrations for specific applications should be determined by the investigator. Appropriate concentrations will be affected by several factors, including secondary antibody affinity, antigen concentration, sensitivity of detection method, temperature and length of incubations, etc. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

**Western Blotting:** 1-3 µg/mL

## STORAGE
Store at 2-8°C for up to one month. Store at –20°C for long-term storage. Avoid repeated freezing and thawing.

(cont'd)

## BACKGROUND

Sprouty-1 and -2 are membrane-anchored phosphoprotein inhibitors of growth factor signaling in endothelial cells. Four mammalian Sprouty homologues (Sprouty-1–4) have been identified. One study showed that overexpressed Sprouty-1 and -2 inhibits fibroblast growth factor– and vascular endothelial growth factor–induced proliferation and differentiation by repressing pathways leading to MAP kinase activation.[1] Sprouty proteins are also endogenous inhibitors of the Ras/MAP kinase pathway that play an important role in the remodeling of branching tissues, such as in development of the lung, kidney tubules, vascular system, and breast ducts.[2]

A recent study shows that Sprouty-1 and –2 may have tumor suppressing activity in the breast, and found that both proteins are consistently down-regulated in breast carcinomas.[2]

## REFERENCES

1. Impagnatiello MA, et al. *J Cell Biol* 152(5):1087-1098, 2001.
2. Lo TL, et al. *Cancer Res* 64(17):6127-6136, 2004.

## RELATED PRODUCTS

| ***Product*** | ***Conjugate*** | ***Cat. No.*** |
|---|---|---|
| Protein A | Sepharose® 4B | 10-1041 |
| rec-Protein G | Sepharose® 4B | 10-1241 |

| **Conjugate** | **ZyMAX™ Goat x Rabbit IgG (H+L)** | **ZyMAX™ Goat x Mouse IgG (H+L)** |
|---|---|---|
| Purified | 81-6100 | 81-6500 |
| FITC | 81-6111 | 81-6511 |
| TRITC | 81-6114 | 81-6514 |
| Cy™3 | 81-6115 | 81-6515 |
| Cy™5 | 81-6116 | 81-6516 |
| HRP | 81-6120 | 81-6520 |
| AP | 81-6122 | 81-6522 |
| Biotin | 81-6140 | 81-6540 |



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