

Qty: 100μg/400 μL

Rabbit anti-ENH (N-term)

Catalog No. 38-8800

Lot No.

Rabbit anti-ENH (N-term)

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.403

IMMUNOGEN

Synthetic peptide derived from the N-terminal region of the human ENH (enigma homologue 1, LIM protein, protein kinase C- binding protein enigma) protein, which differs from mouse and rat ENH by one amino acid.

SPECIFICITY

This antibody reacts with the human, mouse and rat ENH proteins. On Western blots, it identifies the target band at ~65 kDa.

REACTIVITY

Reactivity has been confirmed with human PC-3, LNCap-FGC, Caco-2, and HT-29 cell lysates, mouse heart and skeletal muscle homogenates and rat heart homogenates.

| Sample | Western Blot | Immunoprecipitation |
|--------|--------------|---------------------|
| Human | +++ | 0* |
| Mouse | +++ | ND |
| Rat | +++ | ND |

⁽Excellent +++, Good++, Poor +, No reactivity 0, Not applicable N/A, Not Determined ND)

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)

^{*}No reactivity observed under conditions tested.

BACKGROUND

Enigma homologue (ENH)^{1,2} is a PDZ/LIM domain protein that contains one N-terminal PDZ domain and three C terminal LIM domains.¹ ENH is expressed in the heart and skeletal muscle, and associates through any single LIM domain with the regulatory region of PKC.¹ PDZ/LIM domain proteins also interact with cytoskeletal proteins through their PDZ domain.³⁻⁶

ENH colocalizes with α -actinin at the Z-disk of cardiomyocytes, and associates with actin and α -actinin through the PDZ domain. PDZ/ LIM domain proteins have also been shown to associate with actin stress fibers of non-muscle cells. ENH interacts specifically with both PKC ϵ and N-type Ca ²⁺ channels in neurons, forming a macromolecular complex. ENH thus targets a specific PKC to its substrate to form a functional signaling complex, which is the molecular mechanism for the specificity and efficiency of PKC signaling.

REFERENCES

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- 9. Maeno-Hikichi Y, et al. Nat Neurosci 6:468-475, 2003.

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| rec-Protein G | Sepharose [®] 4B | 10-1241 |

| | ZyMAX™ Goat x Rabbit IgG | ZyMAX™ Goat x Mouse IgG |
|-----------|--------------------------|-------------------------|
| Conjugate | (H+L) | (H+L) |
| Purified | 81-6100 | 81-6500 |
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| TRITC | 81-6114 | 81-6514 |
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