

# Esophagin (M-15): sc-55939

## BACKGROUND

Esophagin, also known as small proline rich protein 3 (SPR3) or cornifin  $\beta$ , belongs to the cornifin family of cornified-envelope structural proteins. It is expressed in mucosal epithelia such as esophagus and tongue and is strongly induced during epidermal keratinocyte differentiation. Due to its highly inducible nature, Esophagin is considered a marker of squamous differentiation. Esophagin serves as a cross-linking protein within the cornified cell envelope and may play a role in the maintenance of normal esophageal epithelial homeostasis. It shares significant homology with the related proteins, SPRR1 and SPRR2. Esophagin is typically not expressed in healthy human epithelium, but its expression is upregulated in numerous hyperproliferative disorders of the skin. In contrast, its expression is dramatically downregulated in esophageal squamous cell carcinoma.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: *Spr3* (mouse) mapping to 3 F1.

## SOURCE

Esophagin (M-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Esophagin of mouse origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-55939 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Esophagin (M-15) is recommended for detection of Esophagin of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1–2  $\mu$ g per 100–500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Esophagin siRNA (m): sc-62283.

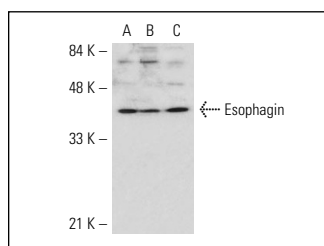
Molecular Weight of Esophagin: 37 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210, 3T3-L1 cell lysate: sc-2243 or F9 cell lysate: sc-2245.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotting A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



Esophagin (M-15): sc-55939. Western blot analysis of Esophagin expression in NIH/3T3 (A), 3T3-L1 (B) and F9 (C) whole cell lysates.

## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\* Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.