

# Intersectin (29): sc-136242

## BACKGROUND

Intersectin, which is also designated Ese1 or ITSN1, is a component of the cellular endocytic machinery. Intersectin is composed of two N-terminal Ese15 homology (EH) domains, a central highly charged region and five C-terminal SH3 domains, which all largely contribute to the association of Intersectin with other components of the endocytic pathway. The EH domain is particularly responsible for the directed localization of Intersectin to Clathrin-coated pits near the plasma membrane. Within the endocytic vesicles the SH3 domains facilitate the binding of Intersectin with Dynamin, and the central domain is essential for the association of Intersectin with SNAP 25. Two isoforms of Intersectin are produced as a result of alternative splicing in a stop codon, and they are designated as Intersectin-short and long (or Intersectin<sub>s</sub> and Intersectin<sub>l</sub>) to reflect an extended C-terminal domain. The long form, which has an extended C-terminal domain, is specifically expressed in neurons; the short form is detected in both glial and nonneuronal cells. The related proteins Intersectin-2 and the murine homolog Ese2 also contain the characteristic N-terminal EH domains, the central coiled-coil domain and five C-terminal SH3 domains and are likely involved the endocytic scaffolding complexes.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: ITSN1 (human) mapping to 21q22.11; Itsn1 (mouse) mapping to 16 C3.3.

## SOURCE

Intersectin (29) is a mouse monoclonal antibody raised against amino acids 800-909 of Intersectin of mouse origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

Intersectin (29) is recommended for detection of Intersectin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for Intersectin siRNA (h): sc-41365, Intersectin siRNA (m): sc-41366, Intersectin shRNA Plasmid (h): sc-41365-SH, Intersectin shRNA Plasmid (m): sc-41366-SH, Intersectin shRNA (h) Lentiviral Particles: sc-41365-V and Intersectin shRNA (m) Lentiviral Particles: sc-41366-V.

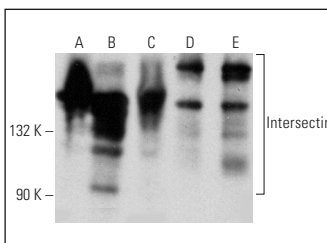
Molecular Weight of Intersectin short/long isoforms: 200/140 kDa.

Positive Controls: NTERA-2 cl.D1 whole cell lysate: sc-364181, NIH/3T3 whole cell lysate: sc-2210 or mouse brain extract: sc-2253.

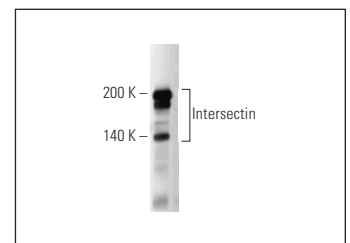
## RECOMMENDED SUPPORT PRODUCTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

## DATA



Intersectin (29): sc-136242. Western blot analysis of Intersectin expression in NTERA-2 cl.D1 (A), NCI-H226 (B) and NIH/3T3 (C) whole cell lysates and mouse brain (D) and rat brain (E) tissue extracts.



Intersectin (29): sc-136242. Western blot analysis of Intersectin expression in rat cerebrum tissue extract.

## 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.