

Intelectin-1/2 (3G1B3): sc-130923

BACKGROUND

Intelectin-1, also known as ITLN1, INTL, Omentin or LFR, is a 313 amino acid protein that contains one fibrinogen C-terminal domain and is either secreted or lipid-anchored to the cell membrane. Highly expressed in small intestine and adipose tissue and present at lower levels in testis, heart, pancreas, colon and skeletal muscle, Intelectin-1 exists as a disulfide-linked homotrimer that functions to enhance Insulin-stimulated glucose uptake and is also thought to participate in host defense against microorganisms. In addition to its roles in glucose regulation and immune system function, Intelectin-1 may also be involved in iron metabolism and obesity regulation in adults. Intelectin-2 shares 85% amino acid identity with Intelectin-1 and, like Intelectin-1, is a secreted protein that contains one fibrinogen C-terminal domain and is thought to play a role in the host defense system. While Intelectin-1 is present in a variety of tissues, Intelectin-2 exists only in the small intestine.

REFERENCES

1. Tsuji, S., et al. 2001. Human intelectin is a novel soluble lectin that recognizes galactofuranose in carbohydrate chains of bacterial cell wall. *J. Biol. Chem.* 276: 23456-23463.
2. Schäffler, A., et al. 2005. Genomic structure of human omentin, a new adipocytokine expressed in omental adipose tissue. *Biochim. Biophys. Acta* 1732: 96-102.
3. Suzuki, Y.A., et al. 2005. Mammalian lactoferrin receptors: structure and function. *Cell. Mol. Life Sci.* 62: 2560-2575.
4. Wali, A., et al. 2005. Identification of intelectin overexpression in malignant pleural mesothelioma by serial analysis of gene expression (SAGE). *Lung Cancer* 48: 19-29.

CHROMOSOMAL LOCATION

Genetic locus: ITLN1/ITLN2 (human) mapping to 1q23.3; Itln1 (mouse) mapping to 1 H3.

SOURCE

Intelectin-1/2 (3G1B3) is a mouse monoclonal antibody raised against recombinant Intelectin-1 of human origin.

PRODUCT

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

Intelectin-1/2 (3G1B3) is available conjugated to agarose (sc-130923 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-130923 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-130923 PE), fluorescein (sc-130923 FITC), Alexa Fluor[®] 488 (sc-130923 AF488), Alexa Fluor[®] 546 (sc-130923 AF546), Alexa Fluor[®] 594 (sc-130923 AF594) or Alexa Fluor[®] 647 (sc-130923 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-130923 AF680) or Alexa Fluor[®] 790 (sc-130923 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

Intelectin-1/2 (3G1B3) is recommended for detection of Intelectin-1 and Intelectin-2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Molecular Weight of Intelectin-1 monomer: 40 kDa.

Molecular Weight of Intelectin-1 homotrimer: 120 kDa.

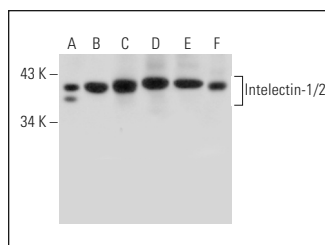
Molecular Weight of Intelectin-2: 36 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, HEK293 whole cell lysate: sc-45136 or human heart extract: sc-363763.

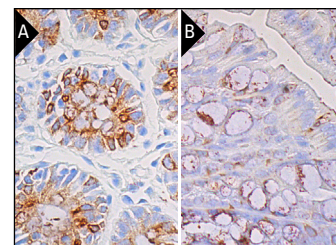
RECOMMENDED SUPPORT REAGENTS

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). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



Intelectin-1/2 (3G1B3): sc-130923. Western blot analysis of Intelectin-1/2 expression in HEK293 (A) and Hep G2 (B) whole cell lysates and human heart (C), mouse colon (D), mouse thymus (E) and human placenta (F) tissue extracts.



Intelectin-1/2 (3G1B3): sc-130923. Immunoperoxidase staining of formalin fixed, paraffin-embedded human rectum tissue showing membrane and cytoplasmic staining of glandular cells (A) and immunoperoxidase staining of formalin fixed, paraffin-embedded mouse colon tissue showing cytoplasmic staining of glandular cells (B). Blocked with 0.25X UltraCruz[®] Blocking Reagent: sc-516214. Detection reagents used: m-IgGκ BP-B: sc-516142 and ImmunoCruz[®] ABC Kit: sc-516216.

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.