

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human Intelectin-1 and human Intelectin-2 in direct ELISAs. Detects human, mouse, and rat Intelectin-1 and Intelectin-2 in Western blots.
Source	Monoclonal Mouse IgG ₁ Clone # 450515
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Intelectin-1 Thr19-Ser298 Accession # Q8WWA0
Conjugate	Alexa Fluor 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Intelectin-1 (intestinal lectin; also ITLN-1 and omentin) is a 40 kDa Ca-dependent galactofuranose-binding lectin that is not a C-type lectin. It is expressed on multiple cell types and appears to participate in insulin signaling and microbe recognition. The human ITLN-1 preproprecursor is 313 amino acids (aa) in length. It contains an 18 aa signal sequence, a 280 aa mature segment (aa 19-298), and a 15 aa C-terminal proregion that is cleaved to generate a GPI-linkage. One fibrinogen-related domain exists in the mature molecule (aa 36-209). Human ITLN-1 exists as a disulfide-linked glycosylated homotrimer. Mouse ITLN-1 is unglycosylated and a monomer. Mature human ITLN-1 is 82% aa identical to mouse ITLN-1. Human ITLN-1 shows one alternate start site at Met72, and a splice form that contains a 32 aa substitution for aa 264-313.

Intelectin-2 (ITLN-2; also endothelial lectin 2 and HL-2) is a 37-41 kDa, likely Ca-dependent carbohydrate-binding lectin that is a member of the X-lectin family of molecules. It is secreted by intestinal Paneth cells, and appears to participate in fungal microbe recognition. The human ITLN-2 precursor is 325 amino acids (aa) in length (SwissProt #:Q8WWU7). It contains a 26 aa signal sequence and a 299 aa mature region. Although mouse ITLN-2 is reportedly GPI-linked, and mouse and human ITLN-2 show considerable C-terminal aa identity, it is not known if human ITLN-2 is also GPI-linked. There is one fibrinogen-related domain in the mature molecule (aa 44-267). One potential splice variant is reported that shows a premature truncation after Gly264. Over aa 29-324, human ITLN-2 shares 79% aa sequence identity with mouse ITLN-2/ITLN-1b, and 85% aa sequence identity with human ITLN-1.

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