

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Occludin in direct ELISAs.
Source	Monoclonal Mouse IgG ₁ Clone # 690213
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	NS0 mouse myeloma cell line transfected with human Occludin Accession # Q16625
Conjugate	Alexa Fluor 532 Excitation Wavelength: 534 nm Emission Wavelength: 553 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.

Immunocytochemistry 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

Occludin is an integral membrane protein with an apparent molecular mass of approximately 65 kDa. It is localized exclusively at tight junctions (TJ) of select epithelial and endothelial cells. The protein is 522 amino acids (aa) in length and contains a cytoplasmic N-terminus, four transmembrane domains, and a long COOH-terminal cytoplasmic domain (domain E) that contains 255 aa. Residues 1-66 make up the first cytoplasmic domain, and that is included in the MARVEL region consisting of aa 57-210. The MARVEL region is a membrane-associating domain that spans aa 67-243. Of note, residues 92-131 are glycine and tyrosine rich. Residues 244-265 constitute the last transmembrane region, with aa 266-522 representing the long cytoplasmic domain termed domain E. At the TJ, Occludin associates with membrane peripheral protein ZO-1 (220 kDa). Human Occludin shares 90% aa sequence identity with mouse Occludin.

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