

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Calreticulin in direct ELISAs. In direct ELISAs, no cross-reactivity with human Vasostatin is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 681207
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Calreticulin Glu18-Leu417 Accession # P27797
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

Human Calreticulin is a 55-60 kDa, 400 amino acid, variably glycosylated intra- and extracellular Ca⁺⁺-binding lectin that is ubiquitously expressed. It consists of three domains: a 180 aa N-terminal globular region, a 111 aa P-, or proline rich domain, and a 109 aa C-terminus. The 180 aa N-terminus (aa 18-197) is termed Vasostatin. It is unclear if it is ever generated naturally via proteolytic processing. Vasostatin domain has many functions. It binds to RNA (aa 18-27), has autocatalytic phosphorylase activity (aa 77-197), binds to a KxFFKR motif on steroid hormone receptors, and serves as a lectin-type chaperone for ER-localized molecules. It also shows antiangiogenic activity, presumably by binding to laminin carbohydrates and blocking endothelial cell adhesion and proliferation. Human Calreticulin is 94% aa identical to mouse and rat Calreticulin.

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