

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse CRISP-1 in direct ELISAs.
Source	Monoclonal Rat IgG _{2B} Clone # 840017
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse CRISP-1 Gln20-His244 Accession # Q03401
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 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.

Neutralization	Optimal dilution of this antibody should be experimentally determined.
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

Cysteine-rich Secretory Protein 1 (CRISP-1), also known as Acidic Epididymal Glycoprotein 1 (AEG1) and Sperm-Coating Glycoprotein 1 (SCP1), is a 29-32 kDa (26.4 kDa predicted) protein that is involved in male reproductive biology (1, 2). CRISPs belong to the CAP superfamily of molecules that also includes several snake, insect, and lizard venom proteins (3). Structurally, CRISPs consist of an N-terminal SCP/CAP domain, a hinge region, and a Cys-rich domain with 16 invariant cysteine residues (4). CRISPs are expressed in discrete but overlapping regions of the male reproductive tract and play a role in spermatozoa adhesion with Sertoli cells and oocytes, decapacitation, and the acrosomal reaction (1). Expression patterns, genomic structure, and sequence conservation indicate that the likely ortholog of human CRISP-1 in mouse and rat is CRISP-4 (5, 6). Mature mouse CRISP-1 shares 68% amino acid (aa) sequence identity with rat CRISP-1. It shares 55%, 73%, and 43% aa sequence identity with mouse CRISP-2, -3, and -4, respectively. Rodent CRISP-1 is secreted by the epididymal epithelium and associates with the surface of spermatozoa in the epididymis where it inhibits capacitation (7-9). It is released from the sperm cell surface once capacitation begins in the female reproductive tract or *in vitro* (10). CRISP-1 is involved in the interaction of spermatozoa with the oocyte zona pellucida as well as in the fusion of sperm and egg (11, 12). CRISP-1 is additionally expressed in the lower medulla of hair shafts and under androgen control in the submandibular salivary glands of male mice (13-15).

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