

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse CRISP-1 in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant mouse CRISP-3 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse CRISP-1 Gln20-His244 Accession # Q03401
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 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

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).

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc., and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.