

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human CRISP-3 in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant human CRISP-2 is observed.
Source	Monoclonal Mouse IgG _{2B} Clone # 295208
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human CRISP-3 Asn21-Tyr245 (Ser106Pro & Ala134Ser) Accession # P54108.1
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *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.

	Recommended Concentration	Sample
Intracellular Staining by Flow Cytometry	0.25-1 µg/10 ⁶ cells	PC-3 human prostate cancer cell line fixed with paraformaldehyde and permeabilized with saponin

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

CRISP-3 is one of three CRISPs (cysteine-rich secretory proteins) found in mammalian exocrine secretions and granulocytes that may play a role in innate immunity (1-3). CRISPs and several snake, insect, and lizard venom proteins are characterized by 16 invariant cysteine residues (4). Structurally, they consist of an N-terminal SCP domain, a hinge region, and a cysteine-rich domain (5). CRISP-3 is produced by salivary, pancreas, prostate, and lacrimal glands, as well as spermatozoa and mature spermatids (2, 6, 7). In mouse, however, CRISP-3 has not been detected in the male genital tract (8, 9). CRISP-3 is up-regulated in epithelial prostate cancer and chronic pancreatitis (10, 11). It is present as 30 kDa and 28 kDa species, corresponding to glycosylated and nonglycosylated forms (1, 3, 7, 10, 12). In serum and seminal fluid, CRISP-3 forms high affinity noncovalent complexes with the more abundant α1B-glycoprotein and β-microseminoprotein/PSP94, respectively (12, 13). Binding is mediated by the SCP domain of CRISP-3 and is independent of glycosylation (12). CRISP-3 is also expressed in pre-B cells but not in T cells or monocytes (14, 15). CRISP-3 is released from neutrophil and eosinophil granules following cell stimulation (1, 15). Mature human CRISP-3 shares 48% and 65% amino acid (aa) sequence identity with mouse and equine CRISP-3, respectively. It shares 44% and 72% aa sequence identity with human CRISP-1 and -2, respectively.

References:

1. Kjeldsen, L. *et al.* (1996) FEBS Lett. **380**:246.
2. Kratzschmar, J. *et al.* (1996) Eur. J. Biochem. **236**:827.
3. Udby, L. *et al.* (2002) J. Immunol. Meth. **263**:43.
4. Yamazaki, Y. and Morita, T. (2004) Toxicon **44**:227.
5. Guo, M. *et al.* (2005) J. Biol. Chem. **280**:12405.
6. Haendler, B. *et al.* (1999) J. Cell. Physiol. **178**:371.
7. Udby, L. *et al.* (2005) J. Androl. **26**:333.
8. Haendler, B. *et al.* (1993) Endocrinology **133**:192.
9. Haendler, B. *et al.* (1997) Eur. J. Biochem. **250**:440.
10. Bjartell, A. *et al.* (2006) Prostate **66**:591.
11. Liao, Q. *et al.* (2003) Histol. Histopathol. **18**:245.
12. Udby, L. *et al.* (2005) Biochem. Biophys. Res. Commun. **333**:555.
13. Udby, L. *et al.* (2004) Biochemistry **43**:12877.
14. Pfisterer, P. *et al.* (1996) Mol. Cell. Biol. **16**:6160.
15. Udby, L. *et al.* (2002) J. Leukoc. Biol. **72**:462.

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.