

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 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 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. <ul style="list-style-type: none"> ● 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:

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