Human CRISP-3 Antibody

Monoclonal Mouse IgG₁ Clone # 295220

Catalog Number: MAB2397

DESCRIPTION	
Species Reactivity	Human
Specificity	Detects human CRISP-3 in direct ELISAs and Western blots. In direct ELISAs, 50% cross-reactivity with recombinant human (rh) CRISP-2 is observed. In Western blots, no cross-reactivity with rhCRISP-2 is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 295220
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
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.
APPLICATIONS	
Please Note: Optimal diluti	ions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.
	Recommended Sample Concentration
Western Blot	1 μg/mL Recombinant Human CRISP-3 (Catalog # 2397-CR) under non-reducing conditions only
PREPARATION AND	STORAGE
Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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 \(\alpha \text{IB-glycoprotein} \) and \(\begin{array}{c} \text{PSP-94}, \text{ respectively} \) (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% as sequence identity with human CRISP-1 and -2, respectively.

References:

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