

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human CRTAC1 in direct ELISAs and Western blots.
Source	Monoclonal Mouse IgG _{2B} Clone # 755339
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human CRTAC1 Ser28-Cys661 Accession # Q9NQ79
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 either lyophilized or as a 0.2 µm filtered solution in PBS.

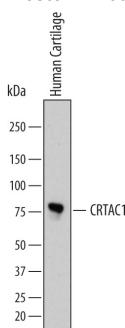
APPLICATIONS

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
Western Blot	2 µg/mL	See Below

DATA

Western Blot



Detection of Human CRTAC1 by Western Blot. Western blot shows lysates of human cartilage tissue. PVDF membrane was probed with 2 µg/mL of Mouse Anti-Human CRTAC1 Monoclonal Antibody (Catalog # MAB52341) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for CRTAC1 at approximately 80 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
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. <ul style="list-style-type: none"> ● 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

CRTAC1 (cartilage acidic protein 1; also CEP-68) is a 95-105 kDa member of a novel family of EGF domain-containing proteins. It is secreted by articular chondrocytes and may play a role in either cartilage matrix organization, or cell-matrix adhesion. Mature human CRTAC1 is 634 amino acids (aa) in length. It contains four FG-GAP (PheGly-GlyAlaPro) domains (aa 46-437) and one EGF-like motif (aa 559-605). Multiple splice forms exist. There are two alternate start sites at Met9 and Met211 that may be accompanied by a 39 aa substitution for the C-terminal 55 aa, or an 84 aa substitution for aa 545-661. Over aa 28-661, human CRTAC1 shares 91% aa identity with mouse CRTAC1. This form in mouse, however, is more equivalent to the human isoform that shows a C-terminal 39 aa substitution. In this case, there is 95% aa identity between mouse and human.