Human CRTAC1 Isoform 1 Antibody

Antigen Affinity-purified Polyclonal Sheep IgG
Catalog Number: AF5234

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human CRTAC1 Isoform 1 in direct ELISAs and Western blots. In Western blots, approximately 10% cross-reactivity with recombinant human CRTAC1 Isoform 2 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human CRTAC1 Isoform 1 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.

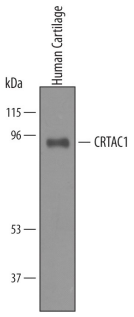
APPLICATIONS

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	1 µg/mL	See Below
Simple Western	10 µg/mL	See Below

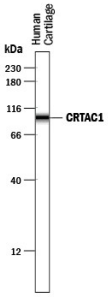
DATA

Western Blot



Detection of Human CRTAC1 by Western Blot. Western blot shows lysates of human cartilage tissue. PVDF membrane was probed with 1 µg/mL of Sheep Anti-Human CRTAC1 Isoform 1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5234) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for CRTAC1 at approximately 95 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 8.

Simple Western



Detection of Human CRTAC1 by Simple Western™. Simple Western lane view shows lysates of human cartilage tissue, loaded at 0.5 mg/mL. A specific band was detected for CRTAC1 at approximately 97 kDa (as indicated) using 10 µg/mL of Sheep Anti-Human CRTAC1 Isoform 1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5234) followed by 1:50 dilution of HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 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

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.

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