

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human CRTAC1 in direct ELISAs.
Source	Monoclonal Mouse IgG _{2B} Clone # 755315
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 as a 0.2 µm filtered solution in PBS.

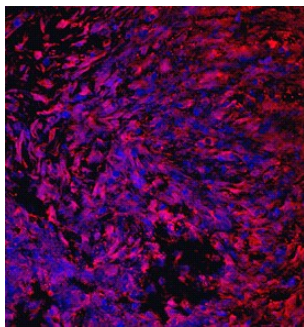
APPLICATIONS

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
Immunocytochemistry	8-25 µg/mL	See Below

DATA

Immunocytochemistry



CRTAC1 in Human Chondrocytes. CRTAC1 was detected in immersion fixed human mesenchymal stem cells differentiated into chondrocytes using Mouse Anti-Human CRTAC1 Monoclonal Antibody (Catalog # MAB5234) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

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.