

Goat Anti-CREM Antibody

Peptide-affinity purified goat antibody Catalog # AF1275a

Specification

Goat Anti-CREM Antibody - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Concentration Isotype Calculated MW WB <u>Q03060</u> <u>NP_898883</u>, <u>1390</u> Human Mouse, Rat, Cow Goat Polyclonal 100ug/200ul IgG 37006

Goat Anti-CREM Antibody - Additional Information

Gene ID 1390

Other Names cAMP-responsive element modulator, Inducible cAMP early repressor, ICER, CREM

Format

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-CREM Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-CREM Antibody - Protein Information

Name CREM (HGNC:2352)

Function

Transcriptional regulator that binds the cAMP response element (CRE), a sequence present in many viral and cellular promoters. Isoforms are either transcriptional activators or repressors. Plays a role in spermatogenesis and is involved in spermatid maturation (PubMed:10373550).

Cellular Location



Nucleus.

Tissue Location

Expressed in testes (round spermatids) (at protein level). Isoform 14 is the major activator form in testes

Goat Anti-CREM Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Goat Anti-CREM Antibody - Images

| | 250kDa 150kDa 100kDa 75kDa 50kDa |
|---|--|
| | |
| - | 37kDa |
| | 25kDa |
| | 20kDa |
| | ZURDU |

AF1275a staining (1 μ g/ml) of human heart lysate (RIPA buffer, 35 μ g total protein per lane). Primary incubated for 1 hour. Detected by western blot using chemiluminescence.

Goat Anti-CREM Antibody - Background

This gene encodes a bZIP transcription factor that binds to the cAMP responsive element found in many viral and cellular promoters. It is an important component of cAMP-mediated signal transduction during the spermatogenetic cycle, as well as other complex processes. Alternative promoter and translation initiation site usage allows this gene to exert spatial and temporal specificity to cAMP responsiveness. Multiple alternatively spliced transcript variants encoding several different isoforms have been found for this gene, with some of them functioning as activators and some as repressors of transcription.

Goat Anti-CREM Antibody - References

Sperm associated antigen 8 (SPAG8), a novel regulator of activator of CREM in testis during spermatogenesis. Wu H, et al. FEBS Lett, 2010 Jul 2. PMID 20488182.

DNA cytosine methylation in the bovine leukemia virus promoter is associated with latency in a lymphoma-derived B-cell line: potential involvement of direct inhibition of cAMP-responsive element (CRE)-binding protein/CRE modulator/activation transcription factor binding. Pierard V, et al. J Biol Chem, 2010 Jun 18. PMID 20413592.

Evaluation of 172 candidate polymorphisms for association with oligozoospermia or azoospermia in



a large cohort of men of European descent. Aston KI, et al. Hum Reprod, 2010 Jun. PMID 20378615. New genetic associations detected in a host response study to hepatitis B vaccine. Davila S, et al. Genes Immun, 2010 Apr. PMID 20237496.

cAMP stringently regulates human cathelicidin antimicrobial peptide expression in the mucosal epithelial cells by activating cAMP-response element-binding protein, AP-1, and inducible cAMP early repressor. Chakraborty K, et al. J Biol Chem, 2009 Aug 14. PMID 19531482.