

Product datasheet

Anti-CREST antibody ab227535

5 Images

Overview

<b>Product name</b>	Anti-CREST antibody
<b>Description</b>	Rabbit polyclonal to CREST
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IP, IHC-P, ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Human
<b>Immunogen</b>	Recombinant fragment within Human CREST (internal sequence). The exact sequence is proprietary. Database link: <a href="#">O75177</a>
<b>Positive control</b>	WB: Mouse brain lysate; HeLa whole cell and nuclear lysates. IP: MCF7 whole cell extract. IHC-P: Huh-7 xenograft tissue. ICC/IF: A431 cells.

Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.00 Preservative: 0.01% Thimerosal (merthiolate) Constituents: 1.21% Tris, 0.75% Glycine, 20% Glycerol
<b>Purity</b>	Immunogen affinity purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab227535** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/500 - 1/3000. Predicted molecular weight: 43 kDa.

Application	Abreviews	Notes
IP		1/100 - 1/500.
IHC-P		1/100 - 1/1000.
ICC/IF		1/100 - 1/1000.

## Target

### Function

Transcriptional activator which is required for calcium-dependent dendritic growth and branching in cortical neurons. Recruits CREB-binding protein (CREBBP) to nuclear bodies. Component of the CREST-BRG1 complex, a multiprotein complex that regulates promoter activation by orchestrating a calcium-dependent release of a repressor complex and a recruitment of an activator complex. In resting neurons, transcription of the c-FOS promoter is inhibited by BRG1-dependent recruitment of a phospho-RB1-HDAC1 repressor complex. Upon calcium influx, RB1 is dephosphorylated by calcineurin, which leads to release of the repressor complex. At the same time, there is increased recruitment of CREBBP to the promoter by a CREST-dependent mechanism, which leads to transcriptional activation. The CREST-BRG1 complex also binds to the NR2B promoter, and activity-dependent induction of NR2B expression involves a release of HDAC1 and recruitment of CREBBP.

### Tissue specificity

Ubiquitous; with lowest levels in spleen.

### Sequence similarities

Belongs to the SS18 family.

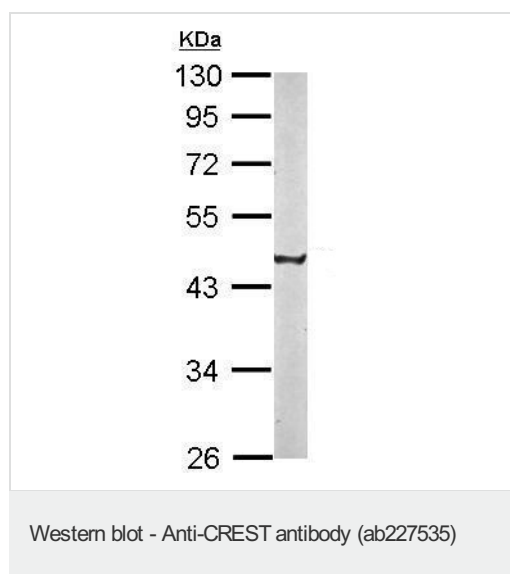
### Domain

The MFD (multi-functional domain) domain is involved in transcription transactivation, nuclear body targeting and dimerization.

### Cellular localization

Nucleus. Chromosome > centromere > kinetochore. Localizes to nuclear bodies. Co-localizes with SGOL1 at kinetochore.

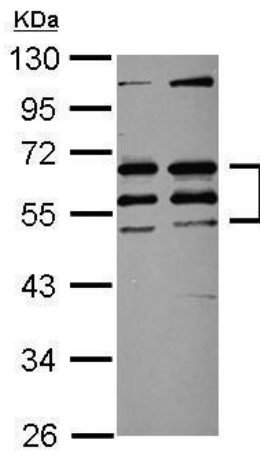
## Images



Anti-CREST antibody (ab227535) at 1/1000 dilution + Mouse brain lysate at 50 µg

**Predicted band size:** 43 kDa

10% SDS-PAGE gel.



Western blot - Anti-CREST antibody (ab227535)

**All lanes** : Anti-CREST antibody (ab227535) at 1/1000 dilution

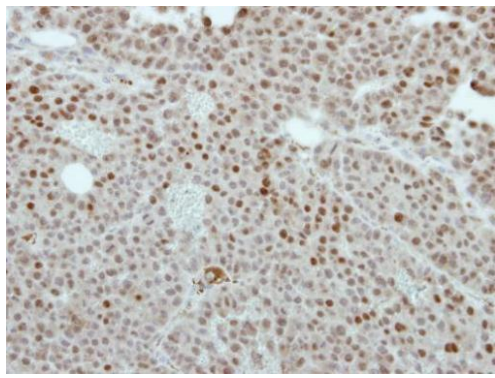
**Lane 1** : HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate

**Lane 2** : HeLa nuclear lysate

Lysates/proteins at 20 µg per lane.

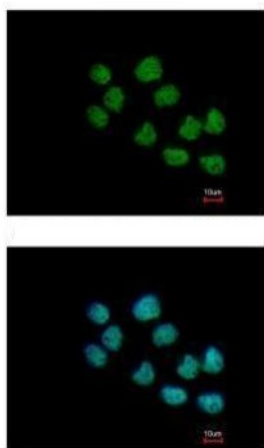
**Predicted band size:** 43 kDa

10% SDS-PAGE gel.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CREST antibody (ab227535)

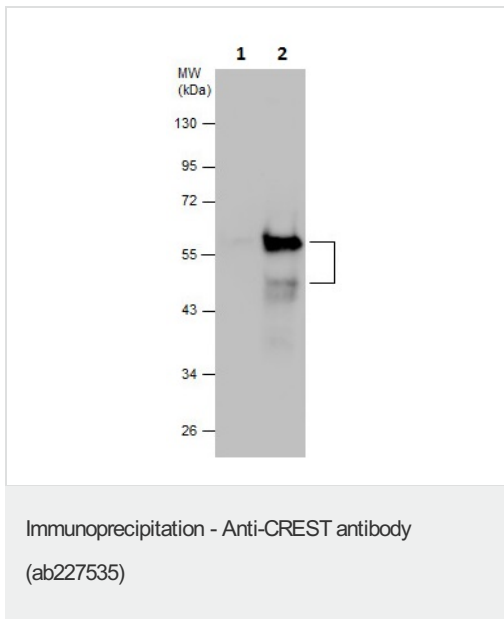
Paraffin-embedded Huh-7 xenograft tissue stained for CREST with ab227535 at 1/500 dilution in immunohistochemical analysis.



Immunocytochemistry/ Immunofluorescence - Anti-CREST antibody (ab227535)

Paraformaldehyde-fixed A431 (human epidermoid carcinoma cell line) cells stained for CREST (green) using ab227535 at 1/500 dilution in ICC/IF.

Blue: Hoechst 33342 staining.



CREST was immunoprecipitated from MCF7 (human breast adenocarcinoma cell line) whole cell extract with 5  $\mu$ g ab227535. Western blot was performed from the immunoprecipitate using ab227535.

Lane 1: Control IgG IP in MCF7 whole cell extract.

Lane 2: ab227535 IP in MCF7 whole cell extract.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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