# Human/Mouse/Rat Phospho-CREB (S133) Antibody

Antigen Affinity-purified Polyclonal Rabbit IgG
Catalog Number: AF2510

## DESCRIPTION

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|---|---|
| **Species Reactivity** | Human/Mouse/Rat |
| **Specificity** | Detects human, mouse, and rat CREB when phosphorylated at S133 in Western blots. |
| **Source** | Polyclonal Rabbit IgG |
| **Purification** | Antigen Affinity-purified |
| **Immunogen** | Phosphopeptide containing human, mouse, and rat CREB S133 site |
| **Formulation** | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.<br>*Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS. |

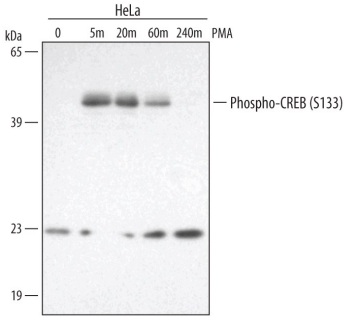
## APPLICATIONS

**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 |
|---|---|---|
| **Western Blot** | 0.5 µg/mL | See Below |
| **Simple Western** | 10 µg/mL | See Below |

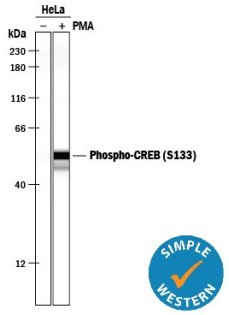
## DATA

### Western Blot




**Detection of Human Phospho-CREB (S133) by Western Blot.** Western blot shows lysates of HeLa human cervical epithelial carcinoma cell line untreated (-) or treated (+) with 200 nM PMA for for the indicated times. PVDF membrane was probed with 0.5 µg/mL of Rabbit Anti-Human/Mouse/Rat Phospho-CREB (S133) Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2510), followed by HRP-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog # HAF008). A specific band was detected for Phospho-CREB (S133) at approximately 43 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

### Simple Western




**Detection of Human Phospho-CREB (S133) by Simple Western™.** Simple Western lane view shows lysates of HeLa human cervical epithelial carcinoma cell line untreated (-) or treated (+) with 200 nM PMA for 20 minutes, loaded at 0.2 mg/mL. A specific band was detected for Phospho-CREB (S133) at approximately 54 kDa (as indicated) using 10 µg/mL of Rabbit Anti-Human/Mouse/Rat Phospho-CREB (S133) Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2510). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.

## PREPARATION AND STORAGE

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| **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.<br>*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.**<br>● 12 months from date of receipt, -20 to -70 °C as supplied.<br>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.<br>● 6 months, -20 to -70 °C under sterile conditions after reconstitution. |

## BACKGROUND

The cAMP response element binding protein (CREB) belongs to the bZIP superfamily of transcription factors, containing a basic domain that mediates DNA binding and a leucine zipper domain that facilitates dimerization. Within the promoter of target genes, CREB dimers bind cAMP response elements, defined by the palindromic consensus sequence TGACGTCA. When phosphorylated at Ser133, CREB also binds the coactivator CREB binding protein (CBP), which enhances transcription by acetylating histones to facilitate chromatin unraveling.



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