

## **COBRA1** Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14765c

#### Specification

# **COBRA1** Antibody (Center) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region WB,E <u>Q8WX92</u> <u>Q8C4Y3</u>, <u>NP\_056271.2</u> Human Mouse Rabbit Polyclonal Rabbit IgG 65697 256-285

#### **COBRA1** Antibody (Center) - Additional Information

Gene ID 25920

**Other Names** Negative elongation factor B, NELF-B, Cofactor of BRCA1, NELFB, COBRA1, KIAA1182

#### Target/Specificity

This COBRA1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 256-285 amino acids from the Central region of human COBRA1.

Dilution WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

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

Precautions

COBRA1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

# **COBRA1** Antibody (Center) - Protein Information

Name NELFB

Synonyms COBRA1 {ECO:0000303|PubMed:11739404}, KI



**Function** Essential component of the NELF complex, a complex that negatively regulates the elongation of transcription by RNA polymerase II (PubMed:<u>12612062</u>). The NELF complex, which acts via an association with the DSIF complex and causes transcriptional pausing, is counteracted by the P-TEFb kinase complex (PubMed:<u>10199401</u>). May be able to induce chromatin unfolding (PubMed:<u>11739404</u>). Essential for early embryogenesis; plays an important role in maintaining the undifferentiated state of embryonic stem cells (ESCs) by preventing unscheduled expression of developmental genes (By similarity). Plays a key role in establishing the responsiveness of stem cells to developmental cues; facilitates plasticity and cell fate commitment in ESCs by establishing the appropriate expression level of signaling molecules (By similarity). Supports the transcription of genes involved in energy metabolism in cardiomyocytes; facilitates the association of transcription initiation factors with the promoters of the metabolism- related genes (By similarity).

Cellular Location Nucleus.

## **Tissue Location**

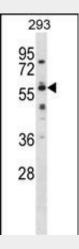
Widely expressed. Expressed in heart, brain, lung, placenta, liver, skeletal muscle, kidney and pancreas

## **COBRA1 Antibody (Center) - Protocols**

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

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

## COBRA1 Antibody (Center) - Images



COBRA1 Antibody (Center) (Cat. #AP14765c) western blot analysis in 293 cell line lysates (35ug/lane). This demonstrates the COBRA1 antibody detected the COBRA1 protein (arrow).

#### COBRA1 Antibody (Center) - Background

NELFB is a subunit of negative elongation factor (NELF),



which also includes NELFA (WHSC2; MIM 606026), either NELFC or NELFD (TH1L; MIM 605297), and NELFE (RDBP; MIM 154040). NELF acts with DRB sensitivity-inducing factor (DSIF), a heterodimer of SPT4 (SUPT4H1; MIM 603555) and SPT5 (SUPT5H; MIM 602102), to cause transcriptional pausing of RNA polymerase II (see MIM 180660) (Narita et al., 2003 [PubMed 12612062]).

## **COBRA1 Antibody (Center) - References**

Sun, J., et al. J. Cell. Biochem. 103(6):1798-1807(2008) Sun, J., et al. J. Steroid Biochem. Mol. Biol. 107 (3-5), 131-139 (2007) : Wu, C., et al. Proteomics 7(11):1775-1785(2007) Narita, T., et al. Mol. Cell 26(3):349-365(2007) Aiyar, S.E., et al. Int. J. Biol. Sci. 3(7):486-492(2007)