

# PRODUCT INFORMATION



## CREB-binding protein bromodomain (human recombinant)

Item No. 11288

### Overview and Properties

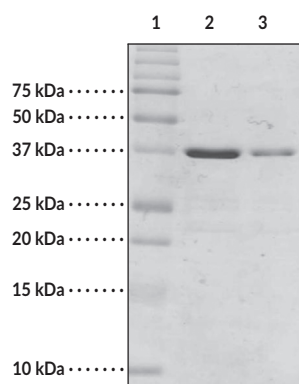
**Synonyms:** cAMP-Response Element-binding Protein 1 CREB-1, CBP, CREBBP  
**Source:** Recombinant N-terminal GST-tagged protein expressed in *E. coli*  
**Amino Acids:** 1081-1197  
**Uniprot No.:** Q92793  
**Molecular Weight:** 40.8 kDa  
**Storage:** -80°C (as supplied)  
**Stability:** ≥1 year  
**Purity:** *batch specific* (91% estimated by SDS-PAGE)  
**Supplied in:** 50 mM Tris, pH 7.5, with 500 mM sodium chloride, 5% glycerol, and 5 mM β-mercaptoethanol

### Protein

**Concentration:** *batch specific* mg/ml

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Image



Lane 1: MW Markers  
Lane 2: CREBBP (5 μg)  
Lane 3: CREBBP (2 μg)

*Representative gel image shown; actual purity may vary between each batch.*

WARNING  
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA  
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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## Description

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The acetylation of histone lysine residues plays a crucial role in the epigenetic regulation of gene transcription. Acetylated lysine residues are recognized by a small protein domain known as a bromodomain.<sup>1</sup> These domains function in the linking of protein complexes to acetylated nucleosomes, thereby controlling chromatin structure and gene expression. Thus, bromodomains serve as “readers” of histone acetylation marks regulating the transcription of target promoters.<sup>2</sup>

The cAMP response element-binding protein (CREB) binding protein (CREBBP) bromodomain has been shown to modulate the stability and function of the tumor suppressor protein p53. CREBBP bromodomain recognizes the acetylated lysine residue 382 on p53.<sup>3,4</sup> This product contains the bromodomain region of CREBBP.<sup>2</sup>

## References

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1. Mujtaba, S., Zeng, L., and Zhou, M.-M. Structure and acetyl-lysine recognition of the bromodomain. *Oncogene* **26**, 5521-5527 (2011).
2. Muller, S., Filippakopoulos, P., and Knapp, S. Bromodomains as therapeutic targets. *Expert Rev. Mol. Med.* **13**, 1-21 (2011).
3. Sachchidanand, L.R.S., Yan, S., Mutjaba, S., *et al.* Target structure-based discovery of small molecules that block human p53 and CREB binding protein association. *Chem. Biol.* **13**, 81-90 (2006).
4. Philpott, M., Yang, J., Tumber, T., *et al.* Bromodomain-peptide displacement assays for interactome mapping and inhibitor discovery. *Mol. Biosyst.* **7(10)**, 2899-2908 (2011).