Technical Data Sheet

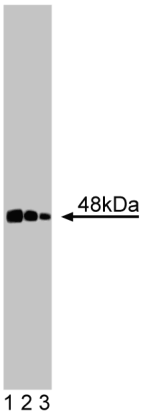
Purified Mouse Anti-CtBP1

Product Information

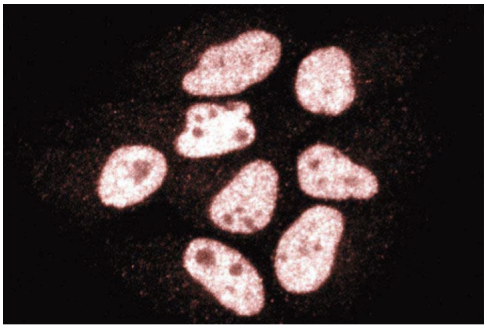
Material Number:	**612042**
Alternate Name:	C-terminal Binding Protein-1
Size:	50 µg
Concentration:	250 µg/ml
Clone:	3/CtBP1
Immunogen:	Mouse CtBP1 aa. 345-441
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Mouse Tested in Development: Human, Rat, Chicken, Dog
Target MW:	48 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

Description

Transcriptional repression is critical for genetic regulation of many cellular proteins, and involves either a transcription regulator that has an intrinsic repressor domain, or a transcription regulator that contains a binding site in the regulatory domain where a corepressor can bind. C-terminal binding proteins (CtBP1 and CtBP2) are a class of corepressors that interact with a subset of transcription factors through a PLDLSL sequence motif. CtBP1 and CtBP2 are 80% homologous, and both are expressed at high levels in embryonic tissues. However, CtBP1 is expressed higher in adult tissues, and is more widely expressed in embryonic and adult tissues. Both CtBP1 and CtBP2 bind the δEF1 zinc finger-homeodomain transcription factor, and enhance transcriptional repression via interaction with the PLDLSL-sequence in δEF1. CtBP1 and CtBP2 bind other zinc finger transcription factors, including Kheper and BKLF. In addition, CtBP2 interacts with other transcription factors, such as hFOG-2, Evi-1, AREB6, and ZEB. Thus, CtBP1 and CtBP2 may be important corepressors for a variety of transcriptional factors.



Western blot analysis of CtBP1 on a BC3H1 cell lysate (Mouse brain smooth muscle-like cells; ATCC CRL-1443). *Lane 1: 1:2500, lane 2: 1:5000, lane 3: 1:10,000 dilution of the mouse anti-CtBP1 antibody.*



Immunofluorescence staining of HeLa cells (Human cervical epitheloid carcinoma; ATCC CCL-2.2).

Preparation and Storage

Store undiluted at -20°C.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Application Notes

Application

Western blot	Routinely Tested
Immunofluorescence	Tested During Development

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Recommended Assay Procedure:

Western blot: Please refer to http://www.bdbiosciences.com/resources/cellbiology/index.jsp

Suggested Companion Products

Catalog Number	Name	Size	Clone
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)
554001	FITC Goat Anti-Mouse Ig	0.5 mg	Polyclonal

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

Furusawa T, Moribe H, Kondoh H, Higashi Y. Identification of CtBP1 and CtBP2 as corepressors of zinc finger-homeodomain factor deltaEF1. *Mol Cell Biol.* 1999; 19(12):8581-8590. (Biology)

Hildebrand JD, Soriano P. Overlapping and unique roles for C-terminal binding protein 1 (CtBP1) and CtBP2 during mouse development. *Mol Cell Biol.* 2002; 22(15):5296-5307. (Biology: Immunohistochemistry, Western blo)

Muraoka O, Ichikawa H, Shi H. Kheper, a novel ZFH/deltaEF1 family member, regulates the development of the neuroectoderm of zebrafish (Danio rerio). *Dev Biol.* 2000; 228(1):29-40. (Biology)

Schaeper U, Boyd JM, Verma S, Uhlmann E, Subramanian T, Chinnadurai G. Molecular cloning and characterization of a cellular phosphoprotein that interacts with a conserved C-terminal domain of adenovirus E1A involved in negative modulation of oncogenic transformation. *Proc Natl Acad Sci U S A.* 1995; 92(23):10467-10471. (Biology)

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