Technical Data Sheet

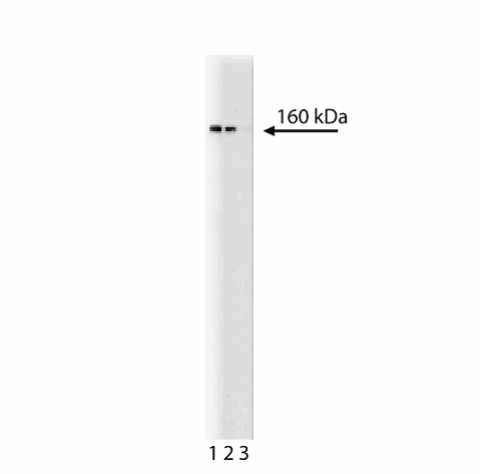
Purified Mouse Anti- AIB-1

Product Information

Material Number:	**611104**
Alternate Name:	Amplified In Breast cancer-1; pCIP; RAC3; TRAM-1
Size:	50 µg
Concentration:	250 µg/ml
Clone:	34/AIB-1
Immunogen:	Human AIB-1 aa. 376-389
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Human Tested in Development: Mouse, Rat
Target MW:	160 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

Description

Signal transduction via nuclear hormone receptors is important for cell growth and differentiation, development, and homeostasis. Nuclear hormone receptors are ligand-activated transcription factors that modulate target gene expression. These ligand/receptor complexes also interact with transcriptional coactivators which enhance ligand-dependent transcription. Various classes of coactivators have been identified, including SRC-1 and its related proteins, such as TIF-2/GRIP-1, RIP140, AIB-1, and TIF-1α and -1β. AIB-1 (Amplified In Breast cancer-1) is also known as pCIP, RAC3, and TRAM-1. It interacts with estrogen receptor (ER) and is overexpressed in breast cancer biopsies and several breast and ovarian cancer cell lines. Similar to SRC-1 and TIF2, AIB-1 contains a basic helix-loop-helix (bHLH) domain followed by a PAS (Per/Arnt/Sim) region, serine and threonine rich regions, and a charged cluster. In addition, AIB-1 contains three copies of the conserved LXXLL motif which is critical to its interaction with the nuclear receptor. Thus, AIB-1 is a coactivator of nuclear receptors that may participate in the development of steroid-dependent cancers.



Western blot analysis of AIB-1 on a Jurkat cell lysate (Human T-cell leukemia; ATCC TIB-152). *Lane 1: 1:250, lane 2: 1:500, lane 3: 1:1000 dilution of the mouse anti-AIB-1 antibody.*

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Store undiluted at -20° C.

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/pharmingen/protocols/Western_Blotting.shtml

Suggested Companion Products

Catalog Number	Name	Size	Clone
611451	Jurkat Cell Lysate	500 µg	(none)
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

Anzick SL, Kononen J, Walker RL, et al. AIB1, a steroid receptor coactivator amplified in breast and ovarian cancer. *Science.* 1997; 277(5328):965-968.(Biology)

Eng FC, Barsalou A, Akutsu N, et al. Different classes of coactivators recognize distinct but overlapping binding sites on the estrogen receptor ligand binding domain. *J Biol Chem.* 1998; 273(43):28371-28377.(Biology)

Lauritsen KJ, List HJ, Reiter R, Wellstein A, Riegel AT. A role for TGF-beta in estrogen and retinoid mediated regulation of the nuclear receptor coactivator AIB1 in MCF-7 breast cancer cells. *Oncogene.* 2002; 21(47):7147-7155.(Biology: Western blot)

Louie MC, Yang HQ, Ma AH, et al. Androgen-induced recruitment of RNA polymerase II to a nuclear receptor-p160 coactivator complex. *Proc Natl Acad Sci U S A.* 2003; 100(5):2226-2230.(Biology: Western blot)

Reiter R, Wellstein A, Riegel AT. An isoform of the coactivator AIB1 that increases hormone and growth factor sensitivity is overexpressed in breast cancer. *J Biol Chem.* 2001; 276(43):39736-39741.(Biology: Western blot)