

TIF1 β Monoclonal Antibody (20A1)

Product Specifications

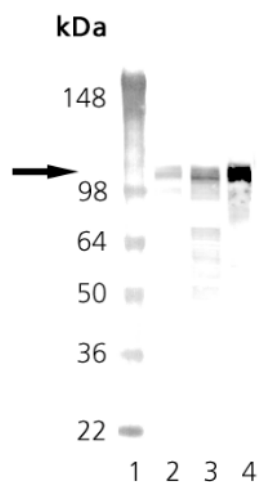
Catalog Number:	KAM-TF200
Source:	Mouse
Isotype:	IgG ₁
Species Reactivity:	Human Other species not tested.
Applications:	WB: 1:3000 (Colorimetric) Other applications not tested. <i>The optimal dilution for a specific application must be determined by the investigator</i>
Predicted M.W.:	~ 110 kDa
Concentration:	See product label
Purification:	Protein G Affinity
Format:	PBS, pH 7.2, 0.09% azide, 50% glycerol
Storage:	Store at -20 °C <i>Shipping conditions may differ from the recommended storage temperature</i>
Immunogen:	Recombinant protein covering the N-terminal half of human TIF1 β
Related Products:	
LYC-HL100	HeLa Cell Lysate
LYC-A4100	A-431 Cell Lysate
SAB-101	Goat anti-Mouse IgG Polyclonal Antibody, AP Conjugate
905-774-100	ATM (pSer1981) Polyclonal Antibody
905-770-100	Chk1 Monoclonal Antibody (2G1D5)

Background:

Transcriptional intermediary factors (TIFs) are a group of transcriptional coactivators and corepressors that regulate gene expression by modulating chromatin structure and assembly of transcription initiation complexes¹. TIF1 β (also known as KAP-1 or KRIP-1) is a member of the TIF1 subfamily of chromatin-associated TIFs that play a key role in many developmental and physiological processes²⁻⁴. The three mammalian TIF1 proteins (TIF1 α , β , and γ) share three conserved domains. An N-terminal RING-B box coiled coil (RBCC) domain most likely attributes to intermolecular structure, while two characteristic chromatin-targeting domains, a plextrin homology (PH) finger motif and bromodomain, are found in the C-terminus. TIF1 β acts as a transcriptional repressor by modulating histone deacetylation, histone H3 Lys-9 methylation, and recruitment of HP1 proteins. TIF1 β was shown to form homo-oligomers *in vitro*, but does not form hetero-oligomers with TIF1 α or TIF1 γ ^{5,6}.

References:

1. Le Douarin, B., *et al.*, (1996) *Philos Trans R Soc Lond B Biol Sci.* **351**, 569-578.
2. Friedman, J.R., *et al.*, (1996) *Genes Dev.* **10**, 2067-2078.
3. Kim, S.S., *et al.*, (1996) *Proc Natl Acad Sci USA.* **93**, 15299-15304.
4. Khetchoumian, K., *et al.*, (2004) *J Biol Chem.* **279**, 48329-48341.
5. Peng, H., *et al.*, (2002) *J Mol Biol.* **320**, 629-644.
6. Germain-Desprez, D., *et al.*, (2003) *J Biol Chem.* **20**, 22367-22373.



Western Blot Analysis of TIF1 β mAb (20A1): Lane 1: MWM, Lane 2: HeLa, Lane 3: A-431, Lane 4: PC-3

FOR RESEARCH USE ONLY; NOT FOR THERAPEUTIC OR DIAGNOSTIC USE

5777 Hines Drive • Ann Arbor, MI • 48108 | Tel: 800-833-8651 or 800-668-6113 | Fax: 734-668-2793
www.assaydesigns.com | orders@assaydesigns.com | technical@assaydesigns.com

Last Revised: 8/7/2008