

**RPB340M101 10µg**  
**Recombinant Actin Beta (ACTb)**  
**Organism Species: Multi-species**  
***Instruction manual***

FOR IN VITRO USE AND RESEARCH USE ONLY  
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

9th Edition (Revised in Jul, 2013)

## **[ PROPERTIES ]**

**Residues:** Met1~Phe375 (Accession # P60709),  
with N-terminal His-Tag.

**Host:** *E. coli*

**Subcellular Location:** Cytoplasm, cytoskeleton .

**Purity:** >95%

**Endotoxin Level:** <1.0EU per 1µg  
(determined by the LAL method).

**Formulation:** Supplied as lyophilized form in PBS,  
pH7.4, containing 5% sucrose, 0.01% sarcosyl.

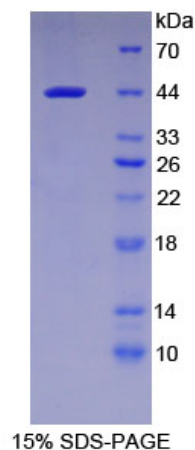
**Predicted isoelectric point:** 5.6

**Predicted Molecular Mass:** 43.3kDa

**Applications:** SDS-PAGE; WB; ELISA; IP.

(May be suitable for use in other assays to be determined by the end user.)

**Note:** Full length human ACTb is identical in sequence to mouse, rat, cavia, ovine, canine, porcine, equine, gallus and bovine. 100% cross-reactivity of ACTb was observed among human, mouse, rat, cavia, ovine, canine, porcine, equine, gallus, and bovine.



## [ USAGE ]

Reconstitute in sterile PBS, pH7.2-pH7.4.

## [ STORAGE AND STABILITY ]

**Storage:** Avoid repeated freeze/thaw cycles.

Store at 2-8°C for one month.

Aliquot and store at -80°C for 12 months.

**Stability Test:** The thermal stability is described by the loss rate of the target protein. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. (Referring from China Biological Products Standard, which was calculated by the Arrhenius equation.) The loss of this protein is less than 5% within the expiration date under appropriate storage condition.

## [ SEQUENCES ]

The target protein is fused with N-terminal His-Tag, its sequence is listed below.

MGHHHHHSGSEF-MDD DIAALVV DNGSGMCKAG FAGDDAPRAV FPSIVGRPRH  
QGVMVGMGQK DSYVGDEAQS KRGILTLKYP IEHGIVTNWD DMEKIWHHTF YNELRVAPEE  
HPVLLTEAPL NPKANREKMT QIMFETFNTP AMYVAIQAVL SLYASGRTTG IVMDSGDGV  
HTVPIYEGYA LPHAILRLDL AGRDLTDYLM KILTERGYSF TTAEREIVR DIKEKLCYVA  
LDFEQEMATA ASSSSLEKSY ELPDGQVITI GNERFRCPEA LFQPSFLGME SCGIHETTFN  
SIMKCDVDIR KDLYANTVLS GGTTMYPGIA DRMQKEITAL APSTMKIKII APPERKYSVW  
IGGSILASLS TFQQMWISKQ EYDESGPSIV HRKCF

## [ REFERENCES ]

1. Ponte P., *et al.* (1984) *Nucleic Acids Res.* 12:1687-1696.
2. Nakajima-Iijima S., *et al.* (1985) *Proc. Natl. Acad. Sci. U.S.A.* 82:6133-6137.
3. Gevaert K., *et al.* (2003) *Nat. Biotechnol.* 21:566-569.
4. Riviere J.B., *et al.* (2012) *Nat. Genet.* 44:440-444.