

**RPB342Mi01 50µg**  
**Recombinant Actin Alpha 2, Smooth Muscle (ACTa2)**  
**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:** Ile167~Phe377 (Accession # P62736),  
with two N-terminal Tags, His-tag and T7-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 20mM Tris,  
150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT,  
0.01% sarcosyl, 5% trehalose, and preservative.

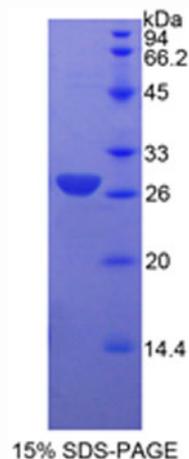
**Predicted isoelectric point:** 6.2

**Predicted Molecular Mass:** 27.6kDa

**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 ACTa2 is identical in sequence to mouse, rat, cavia, rabbit, simian, bovine, equine, and gallus ACTa2. 100% cross-reactivity of ACTa2 was observed among human, mouse, rat, cavia, rabbit, simian, bovine, equine, and gallus.



## [ USAGE ]

Reconstitute in ddH<sub>2</sub>O.

## [ 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 two N-terminal Tags, His-tag and T7-tag, its sequence is listed below.

MGSSHHHHHH SSGLVPRGSH MASMTGGQQM GRGSEF-IYEG YALPHAIMRL  
DLAGRDLTDY LMKILTERGY SFVTTAEREI VRDIKEKLCY VALDFENEMA TAASSSSLEK  
SYELPDGQVI TIGNERFRCP ETLFQPSFIG MESAGIHETT YNSIMKCDID IRKDLYANNV  
LSGGTTMYPG IADRMQKEIT ALAPSTMKIK IAPPERKYS VWIGGSILAS LSTFQQMWIS  
KQEYDEAGPS IVHRKCF

## [ REFERENCES ]

1. Kamada S., Kakunaga T. (1989) *Nucleic Acids Res.* 17:1767-1767.
2. Reddy S., *et al.* (1990) *J. Biol. Chem.* 265:1683-1687.
3. Ueyama H., *et al.* (1984) *Mol. Cell. Biol.* 4:1073-1078.
4. Kamada S., *et al.* (1989) *Gene* 84:455-462.