

**RPA782Ra01 10 $\mu$ g**  
**Recombinant Carbonic Anhydrase II (CA2)**  
**Organism Species: *Rattus norvegicus* (Rat)**  
***Instruction manual***

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

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9th Edition (Revised in Jul, 2013)

**[ PROPERTIES ]**

**Residues:** Met1~Lys260 (Accession # P27139),  
with N-terminal His-Tag.

**Host:** *E. coli*

**Subcellular Location:** Cytoplasm.

**Purity:** >95%

**Endotoxin Level:** <1.0EU per 1 $\mu$ g  
(determined by the LAL method).

**Formulation:** Supplied as lyophilized form in PBS,  
pH7.4, containing 1mM DTT, 5% trehalose, 0.05%  
sarcosyl and preservative.

**Predicted isoelectric point:** 6.8

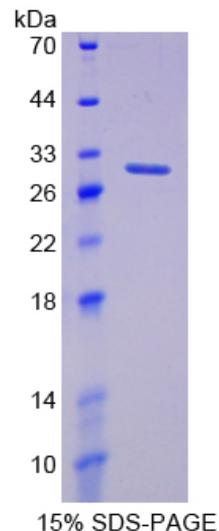
**Predicted Molecular Mass:** 30.6kDa

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

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

**[ 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- MSHHWGYSKS NGPENWHKEF PIANGDRQSP V DIDTGT AQH  
DPSLQPL LIC YDKVASKSIV NNGHSFNVEF DDSQDFAVLK EGPLSGSYRL IQFHFHWGSS  
DGQGSEHTVN KKKYAAELHL VHWNTKYGDF GKAVQHPDGL AVLGIFLKIG PASQGLQKIT  
EALHSIKTKG KRAAFANFDP CSLLPGNLDY WTYPGSLTTP PLLEC VTWIV LKEPITVSSE  
QMSHFRKLN F NSEGEAEELM VDNWRPAQPL KNRKIKASFK

## [ REFERENCES ]

1. Stolle C.A., *et al.* (1991) *Gene* 109:265-267.
2. McGowan M.H., *et al.* (1997) *Gene* 186:181-188.
3. Lehenkari P., *et al.* (1998) *Exp. Cell Res.* 242:128-137.
4. Laitala-Leinonen T., *et al.* (1999) *J. Cell. Sci.* 112:3657-3666.