

**P90982Ra01**  
**Cholinergic Receptor, Muscarinic 1 (CHRM1)**  
**Organism: Rattus norvegicus (Rat)**  
***Instruction manual***

FOR IN VITRO USE AND RESEARCH USE ONLY  
NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES

5th Edition (Revised in January, 2013)

**[ DESCRIPTION ]**

**Protein Names:** Cholinergic Receptor, Muscarinic 1

**Synonyms:** CHRM1, Chrm-1

**Species:** Rat

**Size:** 100µg

**Source:** *Escherichia coli*-derived

**Subcellular Location:** Cell membrane; Multi-pass membrane protein. Cell junction, synapse, postsynaptic cell membrane.

**[ PROPERTIES ]**

**Residues:** Arg210~Ala363 (Accession # P08482), with N-terminal His-Tag.

**Grade & Purity:** >95%, 24kDa as determined by SDS-PAGE reducing conditions.

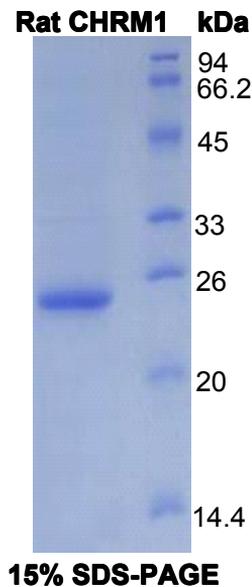
**Formulation:** Supplied as lyophilized form in PBS, pH 7.4, containing 0.1% Sarcosyl, 5% sucrose.

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

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

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

**Predicted Molecular Mass:** 18.3kDa



SDS-PAGE is a technique that separates proteins based on size. However, the actual band size observed may differ from the predicted; the common factors may include three terms:

1. Alternative splicing (splice variants).
2. The composition of amino acids may give the protein the different relative charge.
3. Polymerization of the target protein.

**Predicted isoelectric point:** 9.1

### **[ PREPARATION ]**

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-R IYRETENRAR ELAALQGSET PGKGGGSSSS SERSQPGAEG  
SPESPPGRCC RCCRAPRLQ AYSWKEEEEE DEGSMSLTS SEGEEPGSEV  
VIKMPMVDSE AQAPTKQPPK SSPNTVKRPT KKGRDRGGKG QKPRGKEQLA  
KRKTFSLVKE KKA

### **[ REFERENCES ]**

1. Takamori M., *et al.* (2007) Eur. J. Neurol. 14:1230-1235.
2. Maeda Y., *et al.* (2006) Am. J. Respir. Crit. Care Med. 174:1119-1124.
3. Santafe M.M., *et al.* (2003) Eur. J. Neurosci. 17:119-127.
4. Anagnostaras S.G., *et al.* (2003) Nat. Neurosci. 6:51-58.