

RPB329Ra01 10 μ g

Microtubule Associated Protein 2 (MAP2)

Organism: Rattus norvegicus (Rat)

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: Thr1459~Arg1718 (Accession # P15146),
with two N-terminal Tags, His-tag and GST-tag.

Host: *E. coli*

Subcellular Location: Cytoplasm > cytoskeleton.

Purity: >95%

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

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

Predicted isoelectric point: 9.6

Predicted Molecular Mass: 60.0kDa

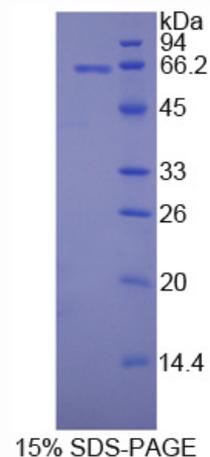
Accurate Molecular Mass: 65kDa as determined by SDS-PAGE reducing conditions.

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

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

Note: The possible reasons that the actual band size differs from the predicted are as follows:

1. Splice variants: Alternative splicing may create different sized proteins from the same gene.
2. Relative charge: The composition of amino acids may affects the charge of the protein.
3. Post-translational modification: Phosphorylation, glycosylation, methylation etc.
4. Post-translation cleavage: Many proteins are synthesized as pro-proteins, and then cleaved to give the active form.
5. Polymerization of the target protein: Dimerization, multimerization etc.



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

MSPILGYWKI KGLVQPTRL L LEYLEEKYEE HLYERDEGDK WRNKKFELGL EFPNLPYYID
GDVKLTQSMA IIRYIADKHN MLGGCPKERA EISMLEGAVL DIRYGVSR IA YSKDFETLKV
DFLSKLP EML KMFEDRLCHK TYLNGDHVTH PDFMLYDALD VVLYMDPMCL DAFPKLVCFK
KRIEAIQID KYLKSSKYIA WPLQGWQATF GGGDHPKSD GSTSGSGHHH HHSAGLVPR
GSTAIGMKET AA AKFERQHM DSPDLGTLEV LFQGPLGSEF-TV SRDEVRRKKA
VYKKAELAKE SEVQAHS PSR KLILKPAIKY TRPTHLSCVK RKT TATSGES AQAPSAFKQA
KDKVTDGITK SPEKRSSLPR PSSILPPRRG VSGDRENSF SLNSSISSAR RTRRSEPIRR
AGKSGTSTPT TPGSTAITPG TPPSYSSRTP GTPGTPSYPR TPGTPKSGIL VPSEKKVAII
RTPPKSPATP KQLRLINQPL PDLKNV KSKI GSTDNIKYQP KGGQVQIVTK KIDLSHVTSK
CGSLKNIR

[REFERENCES]

1. Yan X.X., *et al.* (2012) *Exp. Neurol.* 235:228-237.
2. Bolognin S., *et al.* (2012) *Acta Neuropathol.* 123:133-151.
3. Park D., *et al.* (2012) *J. Neurosci. Res.* 90:461-467.
4. Saraceno G.E., *et al.* (2012) *Synapse* 66:9-19.