

# Active Recombinant Full Length Human RRM1 Protein, C-Flag-tagged

**Cat. No.** RRM1-179HFL    **Lot. No.** (See product label)

## SPECIFICATION

<b>Product Overview</b>	Recombinant Full Length Human RRM1 Protein, fused to Flag-tag at C-terminus, was expressed in Mammalian cells.
<b>Species</b>	Human
<b>Source</b>	Mammalian Cells
<b>Description</b>	This gene encodes the large and catalytic subunit of ribonucleotide reductase, an enzyme essential for the conversion of ribonucleotides into deoxyribonucleotides. A pool of available deoxyribonucleotides is important for DNA replication during S phase of the cell cycle as well as multiple DNA repair processes. Alternative splicing results in multiple transcript variants.
<b>Form</b>	25 mM Tris HCl, pH 7.3, 100 mM glycine, 10% glycerol.
<b>Bio-activity</b>	Binding assay
<b>Molecular Mass</b>	89.9 kDa
<b>AA Sequence</b>	MHVIKRDGRQERVMFDKITSRIQKLCYGLNMDFVDPAQITMKVIQGLYSGVTTVELD TLAAETAATLTT KHPDYAILAARIAVSNLHKETKKVFSVDMEDLYNYINPHNGKHSPM VAKSTLDIVLANKDRLNSAIIYD RDFSYNFYGFKTLERSYLLKINGKVAERPQHMLMR VSVGIIHKEDIDAAIETYNLLSERWFTHASPTLFN AGTNRPQLSSCFLLSMKDDDSIEGI YDTLKQCALISKSAGGIGVAVSCIRATGSYIAGTNGNSNGLVPML RVYNNTARYVDQ

 Tel: 1-631-559-9269    1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

GGNKRPGAFAIYLEPWHLDFEFLDLKKNTGKEEQRARDLFFALWIPDLFMKRVETN  
 QDWSLMCPNECPGLDEVWGEEFEKLYASYEKQGRVRKVVKAQQLWYAIIESQTET  
 GTPYMLYKDSCNRK SNQQNLGTIKCSNLCTEIVEYTSKDEVAVCNLASLALNMYVT  
 SEHTYDFKKLAEVTKVVVRNLNKIIDI NYYPVPEACLSNKRHRPIGIGVQGLADAFILM  
 RYPFESAEAQLLNKQIFETIYYGALEASCDLAKEQGP YETIEGSPVSKGILQYDMWN  
 VTPTDLWDWKVLKEKIAKYGIRNSLLIAPMPTASTAQILGNNEPIEPT SNIYTRRVLS  
 GEFQIVNPHLLKDLTERGLWHEEMKNQIIACNGSIQSIPEIPDDLKQLYKTVWEISQKT  
 VLKMAAERGAFIDQSQSLNIHIAEPNYGKLTSMHFYGWKQGLKTGMYYLRTRPAAN  
 PIQFTLNKEKLD  
 KEKVSKEEEEKERNTAAMVCSLENRDECLMCGSTRTRPLEQKLISEEDLAANDILDY  
 KDDDDKV

<b>Purity</b>	> 80% as determined by SDS-PAGE and Coomassie blue staining.
<b>Stability</b>	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
<b>Storage</b>	Store at -80 centigrade.
<b>Concentration</b>	>50 ug/mL as determined by microplate BCA method.
<b>Preparation</b>	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
<b>Protein Families</b>	Druggable Genome
<b>Protein Pathways</b>	Glutathione metabolism, Metabolic pathways, Purine metabolism, Pyrimidine metabolism
<b>Full Length</b>	Full L.

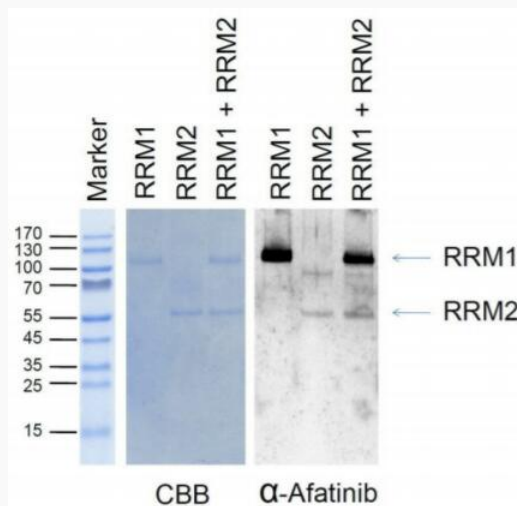
 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

## GENE INFORMATION

<b>Gene Name</b>	RRM1 ribonucleotide reductase catalytic subunit M1 [ Homo sapiens (human) ]
<b>Official Symbol</b>	RRM1
<b>Synonyms</b>	R1; RR1; RIR1
<b>Gene ID</b>	6240
<b>mRNA Refseq</b>	NM_001033.5
<b>Protein Refseq</b>	NP_001024.1
<b>MIM</b>	180410
<b>UniProt ID</b>	P23921



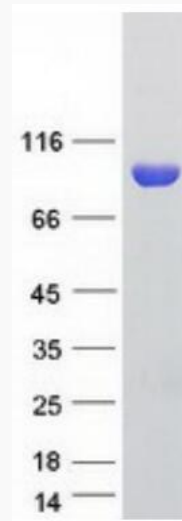
Afatinib, a covalent inhibitor of ErbB family, modifies RRM1 and RRM2. Two ug

Tel: 1-631-559-9269 1-516-512-3133

Email: [info@creative-biomart.com](mailto:info@creative-biomart.com) Fax: 1-631-938-8127

45-1 Ramsey Road, Shirley, NY 11967, USA

recombinant RRM1 and/or 1 ug RRM2 in the presence of 12.5 uM afatinib were incubated for one hour at 37 centigrade. The reaction product was examined by Coomassie blue G-250 staining and immunoblotting with anti-afatinib antiserum.



Coomassie blue staining of purified RRM1 protein.

Tel: 1-631-559-9269 1-516-512-3133

Email: [info@creative-biomart.com](mailto:info@creative-biomart.com) Fax: 1-631-938-8127

45-1 Ramsey Road, Shirley, NY 11967, USA