

Plasmid: pEmal10H – MBP-EWSR1-449-513 (RGG2)
 Gene: Human EWSR1
 Vector: pEmal10H
 Host: BL21(DE3)*
 Resistance Markers: Ampicillin
 Cloning Sites: KasI/BamHI

Source (ref., etc.): The EWSR1-449-513 was made site-directed deletion with EWSR1-Del-359-448 Forward primer ATTTTCAGGGCGCCCCGCCGATGAACAGCATGCG and EWSR1-Del 359-448 Reverse primer GGCGCCCTGAAAATAAAGATTCTCCCCGAGGTTGTTGTTATTG using pEmal10H – MBP-EWSR1-359-513 (RRM+RGG2) (DL248) as template to construct pEmal10H-MBP-EWSR1-449-513 (RGG2).

Map:

```

CGAAATTAATACGACTCACTATAGG GGAATTGTGAGCGGATAACAATTCC CCTCTAGAATAATTTGTTTAACTTTAAG
      T7 promotor                lac operator                XbaI

      NdeI
AAGGAGATATCATATGGGCCATCATCATCATCATCATCATCATCATCACAGCAGCATGAAAATCGAAGAAGGTAAACTGG
      MetGlyHisHisHisHisHisHisHisHisHisHisSerSer<----->

TAAT [snip]GCGTACTGCGGTGATCAACGCCGCCAGCGGTCGTCAGACTGTCGATGAAGCCCTGAAAGACGCGCAGACT
-----Maltose Binding Protein----->

AATTCGAGCTCGAACAACAACAACAATAACAATAACAACAACTCGGGGAGAATCTTTATTTTCAGGGCGCCATGGTCTA
AsnSerSerSerAsnAsnAsnAsnAsnAsnAsnAsnAsnAsnLeuGlyGluAsnLeuTyrPheGlnGlyAlaMetVal
      Asn-spacer                TeV binding |
                                TeV cut

GTCGACTCGAGGATCCGGCTGCTAACAAAGCCCGAAAGGAAGCTGAGTTGGCTGCTGCCACCGCTGAGCAATAACTAGCA
      SalI XhoI BamHI                T7 Terminator
  
```

Encoded sequence:

```

MGHHHHHHHHSSMKIEEGKLVIIWINGDKYNGLAIEVGKKFEKDTGIKVTVEHPDKLEEKFPQVAATGDGPDIIFWAHDRFGGYA
QSGLLAEITPDKAFQDKLYPFTWDVAVRYNGKLIAYPIAVEALSLIYNKDLLPNPPKTWEEIIPALDKELKAKGKSALMFNLQEPYFT
WPLIAADGGYAFKYENGYDIKDVGVNDNAGAKAGLTFVLVDLIKHKHMADTDYSIAEAAFNKGETAMTINGPWAWSNIDTSKVNIG
VTVLPFTFKGQPSKPFVGVLSAGINAASPNKELAKEFLENYLLTDEGLEAVNKDKPLGAVALKSYEEELAKDPRIAATMENAQKEI
AKDPRIAATMENAVRTAVINAASGRQTVDEALKDAQTNSSNNNNNNNNNNLGENLYFQGAPPMNSMRGGLPPREGRMPPPLRGG
PGGGGGGPMGRMGGRGGDRGGFPPRGPRGSRGNPSGGG
  
```

Sequencing shows construct #1 and #2 have right sequence on 2/2/2023.