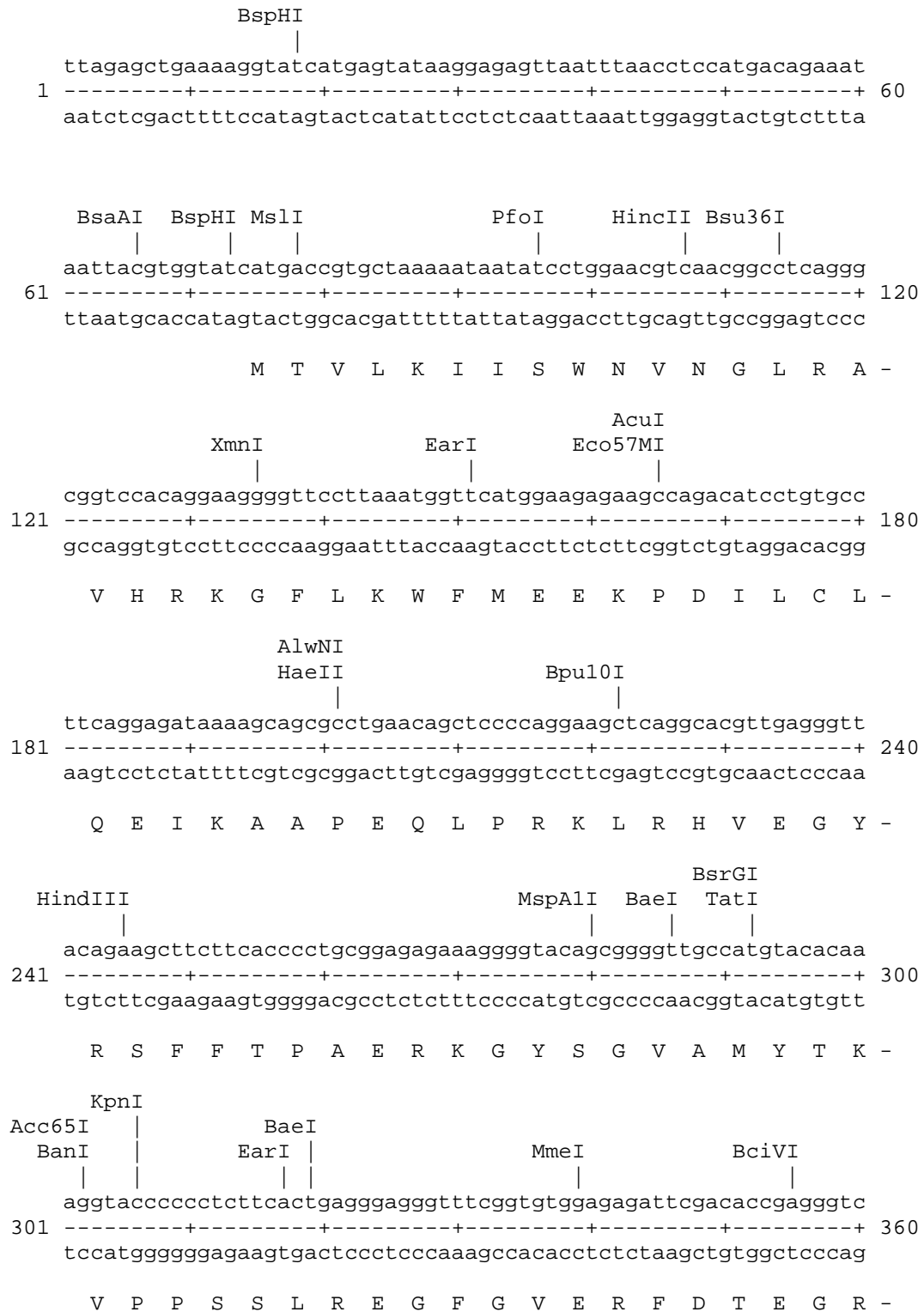


Nucleotide and amino acid sequences of Mth212. Restriction map



```

      BsaBI           BseRI
      |             |
ggatacagatcgagactttgacgacttcctcctctacaacatatacttccccaacggta
361 -----+-----+-----+-----+-----+-----+-----+ 420
cctatgtctagcgtctgaaactgctgaaggaggagatggtgtatatgaaggggttgccat

      I   Q   I   A   D   F   D   D   F   L   L   Y   N   I   Y   F   P   N   G   K   -

                        AcuI
                        Eco57MI
                        ApoI
      BseRI   EcoRI   |   BsmI   SmlI   BsaHI   ZraI
      |       |       |       |       |       |
agatgtcagaggagagggtgaagtataaaactggaattctatgacgcattccttgaggacg
421 -----+-----+-----+-----+-----+-----+-----+ 480
tctacagtctcctctccgacttcataatttgaccttaagatactgcgtaaggaactcctgc

      M   S   E   E   R   L   K   Y   K   L   E   F   Y   D   A   F   L   E   D   V   -

HincII
AatII |           BpuEI
  ||   |
tcaaccgggagaggggattcggggaggaacgtgattatatgtggggacttcaacacagccc
481 -----+-----+-----+-----+-----+-----+-----+ 540
agttggccctctccctaagccccctccttgccactaatatacacccctgaagttgtgtcggg

      N   R   E   R   D   S   G   R   N   V   I   I   C   G   D   F   N   T   A   H   -

acagggagatagaccttgcaaggccaaaggaaaacagcaacgtatcaggtttccttcccg
541 -----+-----+-----+-----+-----+-----+-----+ 600
tgtccctctatctggaacgttccggttcccttttgcgttgcatagtccaaaggaagggc

      R   E   I   D   L   A   R   P   K   E   N   S   N   V   S   G   F   L   P   V   -

                        AcuI
EcoO109I   ClaI   ApoI   Eco57MI   BsaAI
  |         |         |         |         |
ttgagagggcctggatcgataaatttattgaaaatgggtacgtggacaccttcaggatgt
601 -----+-----+-----+-----+-----+-----+-----+ 660
aactctcccggacctagctattttaataacttttaccatgcacctgtggaagtcctaca

      E   R   A   W   I   D   K   F   I   E   N   G   Y   V   D   T   F   R   M   F   -

                        ApaI
                        BanII
                        Bme1580I
                        Bsp1286I
                        EcoO109I
      TatI   DraIII   SfcI   PspOMI
      |       |       |       |
tcaacagtgacccccggacgtacacatggtggagctacaggacaagggcccgtagagga
661 -----+-----+-----+-----+-----+-----+-----+ 720
agttgtcactggggcctgtcatgtgtaccacctcgatgtcctgttcccgggactctcct

      N   S   D   P   G   Q   Y   T   W   W   S   Y   R   T   R   A   R   E   R   N   -

```

BpmI
 Eco57MI
 BseRI

acgtcggctggagactcgactacttctttgtaaacgaggagttcaaaggaaggttaaaa
 721 -----+-----+-----+-----+-----+-----+ 780
 tgcagccgacctctgagctgatgaagaaacatttgctcctcaagtttccttccaatttt

V G W R L D Y F F V N E E F K G K V K R -

PfoI
 BciVI
 EcoO109I
 PpuMI
 BanII
 Bsp1286I
 PshAI
 BstXI

ggtcctggatactctcagatgtcatgggctcagaccactgtcccataggactggaaatag
 781 -----+-----+-----+-----+-----+-----+ 840
 ccaggacctatgagagttctacagtacccgagttctggtgacagggtatcctgacctttatc

S W I L S D V M G S D H C P I G L E I E -

aactataatcaactcgataaacatcagaaatgtgattaggaactccatcaggcgaaaaacta
 841 -----+-----+-----+-----+-----+-----+ 900
 ttgatattagttgagctattgtagttctttacactaatccttgaggtagtccgcttttgat

L *

Enzymes that do cut:

| | | | | | | | |
|---------|--------|----------|----------|----------|-------|-------|--------|
| AatII | Acc65I | AcuI | AlwNI | ApaI | ApoI | BaeI | BanI |
| BanII | BciVI | Bme1580I | BpmI | Bpu10I | BpuEI | BsaAI | BsaBI |
| BsaHI | BseRI | BsmI | Bsp1286I | BspHI | BsrGI | BstXI | Bsu36I |
| ClaI | DraIII | EarI | Eco57MI | EcoO109I | EcoRI | HaeII | HincII |
| HindIII | KpnI | MmeI | MslI | MspAI | PfoI | PpuMI | PshAI |
| PspOMI | SfcI | SmlI | TatI | XmnI | ZraI | | |

Enzymes that do not cut:

| | | | | | | | |
|---------|--------|-------|---------|-------|---------|--------|--------|
| AarI | AccI | AclI | AfeI | AflII | AflIII | AgeI | AhdI |
| AleI | AlfI | AloI | ApalI | AscI | AseI | AsiSI | AvaI |
| AvrII | BamHI | BbeI | BbsI | BbvCI | BcgI | BclI | BfrBI |
| BglI | BglII | BlpI | BmgBI | BmrI | BmtI | BplI | BsaI |
| BsaWI | BsaXI | BseYI | BsgI | BsiEI | BsiHKAI | BsiWI | BsmBI |
| BspEI | BspMI | BsrBI | BsrDI | BsrFI | BssHII | BssSI | BstAPI |
| BstBI | BstEII | BstYI | BstZ17I | BtgI | BtgZI | BtsI | CspCI |
| DraI | DrdI | EaeI | EagI | EciI | EcoICRI | EcoNI | EcoRV |
| FalI | FseI | FspI | FspAI | Hin4I | HpaI | KasI | MfeI |
| MluI | MscI | NaeI | NarI | NcoI | NdeI | NgoMIV | NheI |
| NotI | NruI | NsiI | NspI | PacI | PasI | PciI | PflMI |
| PmeI | PmlI | PpiI | PsiI | PspXI | PsrI | PstI | PvuI |
| PvuII | RsrII | SacI | SacII | SalI | SanDI | SapI | SbfI |
| ScaI | SexAI | SfiI | SfoI | SgrAI | SmaI | SnaBI | SpeI |
| SphI | SrfI | SspI | StuI | StyI | SwaI | TaqII | TstI |
| Tth111I | XbaI | XcmI | XhoI | XmaI | | | |