

**Plasmid Name:** pMM287

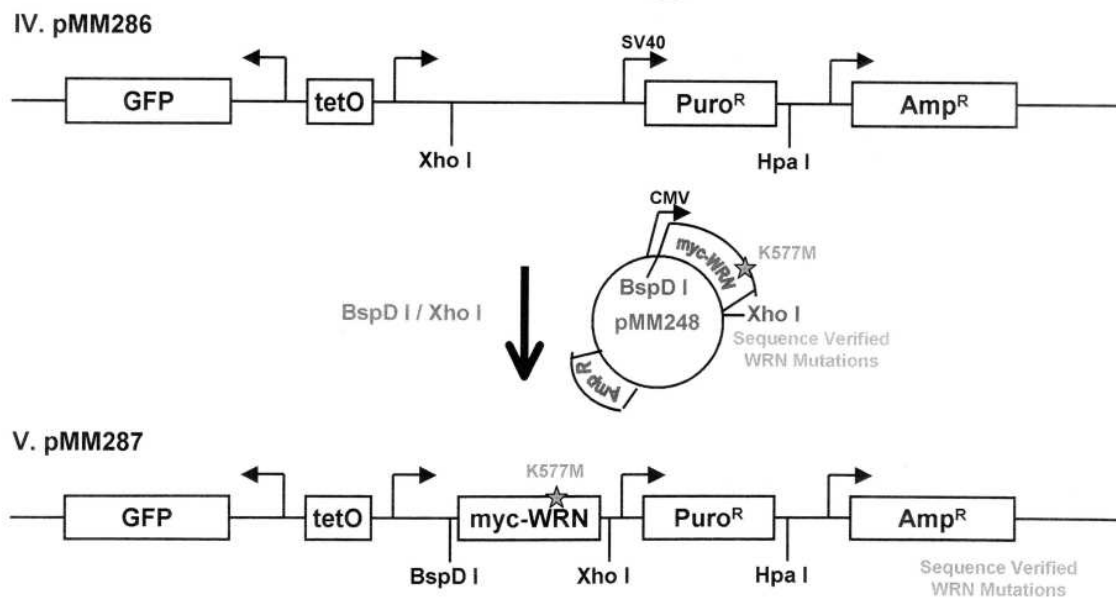
**Aliases:** none known

**Length:** 11707 bp

**Constructed by:** Mike Moser/Cristina Swanson

**Last update:** Alden Hackmann 17 August 2009

**Description and application:** This is a mammalian expression vector for helicase-dead human WRN protein. It was constructed from pBI, a Clontech plasmid with a bi-directional promoter + TRE backbone, modified by insertion of a polylinker containing BspD1 and XhoI sites followed by insertion of a myc-WRN K577M ORF – created by making K577M (A>T) mutation in pMM290 sequence [NB this is not how the plasmid was originally constructed – see plasmid construction outline below.]



**NB:** the WRN sequence in this plasmid contains a number of variations from the WT WRN sequence (NM\_000553.4). These polymorphisms are either silent or do not alter the function of the WRN protein. \*The A>G nucleotide change at position 235 was introduced into the WRN sequence during the cloning to generate myc epitope-tagged WRN. The subsequent amino acid change does not appear to have any functional consequence on the WRN protein.

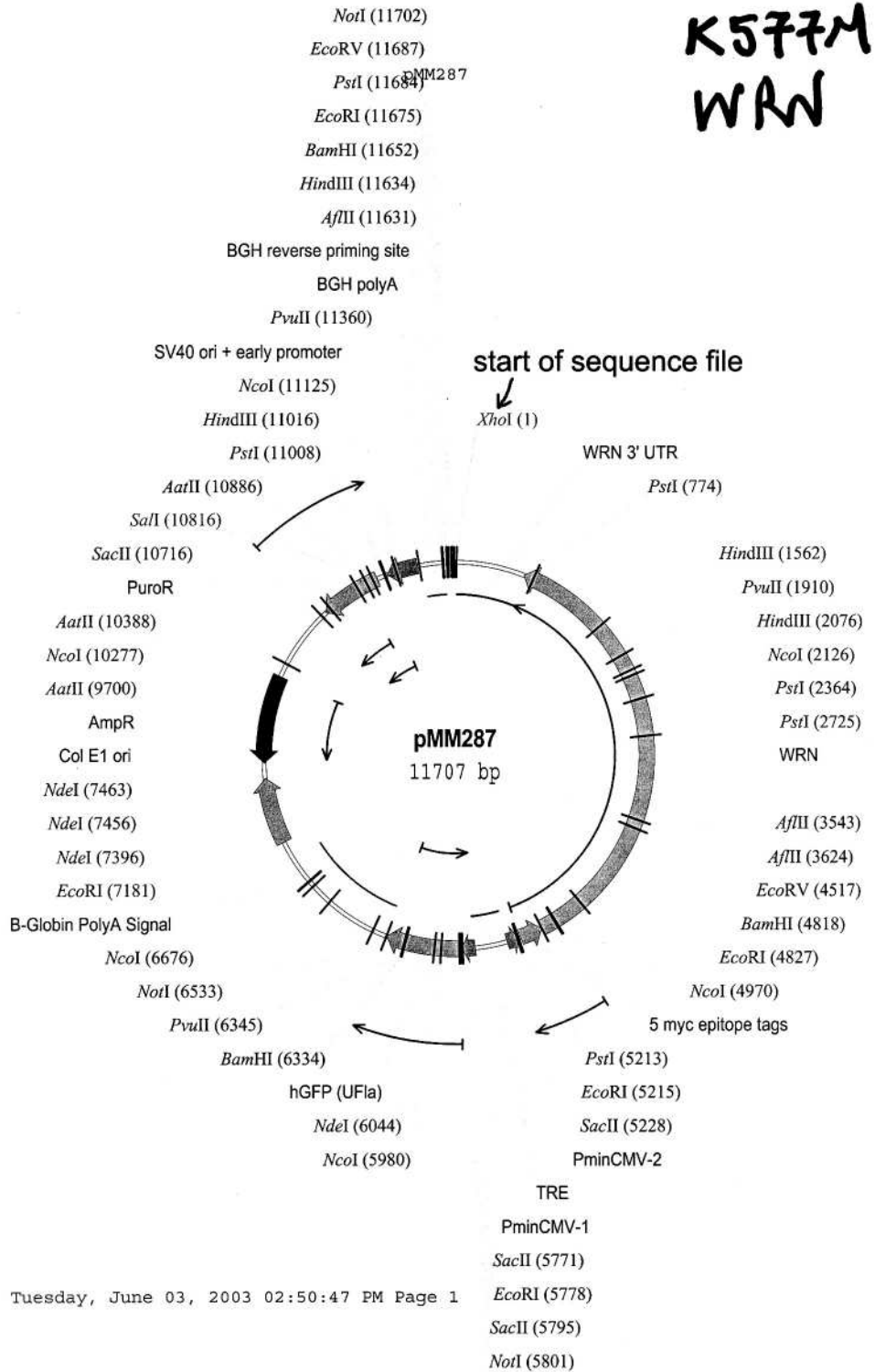
Nucleotide position in cDNA	Exon	Nucleotide change	Amino acid number	Amino acid change
235*	2	A>G	2	Ser>Gly
270	2	G>A	13	Arg>Arg
501	4	T>C	90	Asn>Asn
678	5	A>T	149	Arg>Arg
1386	9	A>G	385	Glu>Glu
2592	20	T>G	787	Leu>Leu
3453	26	T>G	1074	Phe>Leu
4314	34	C>T	1361	Ser>Ser

**Selections:** AmpR, PuroR

[continue to next page]

**Map:**

**K577M  
WRN**



**Feature table:**

WRN	677 – 5191, reverse
PminCMV's	5796-6527, forward
AmpR	8707-9564, reverse
PurOR	10332-10999, reverse

MCS/polylinker sequence:

Experimental verification: YES

by restriction mapping: Y

DNA sequencing: Y

Western or other expression check/other [list]: Western

**Location:** wet/frozen/glycerol stock/transfected cells/other [list]

Frozen stock in P-374

Glycerol in N-314

**Source of sequence:** VectorNTI collection

**Sequence:**

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