NRCD Human Full-Length cDNA Clone

Gene Engineering Division
RIKEN BioResource Research Center

RIKEN Clone ID : RBd52E11

Lot# : 7677_B5Av

Vector : pGCAP10

Gene	PXDN	
RefSeq_mRNA	-	-

● Plasmid DNA purification

Date : 2025/01/30 Culture : LB (100 ug/ml Ampicillin) 5 ml -> at 37 deg C O/N

Date : 2025/01/31 Purification : QIAGEN Miniprep kit -> dH_2O 100 ul

● Digestion by restriction enzyme/Concentrarion calibration

Date : 2025/01/31

DNA concentration (O.D.): 156 ng/ul

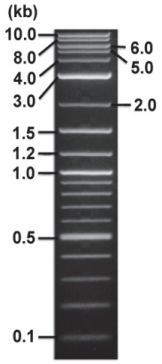
DNA	0.65 ul
Enzyme (BamHI)	1 ul
Buffer H	1 ul
dH_2O	7.35 ul
Total	10 ul

< Size of fragment expected from this clone >

BamHI 3.1kb (vector), 3.0, 2.2, 0.3 kb

Erectrophoresis : 1% agarose gel, 1x TAE Buffer

Marker : 2-Log DNA Ladder (NEB#N3200L)





①:Marker
②:uncut
③:BamHI

● Confirmation of the sequence

Date : 2025/02/05

full sequence	RBd52E11hts01.seq

● Adjust plasmid DNA solution to 25 ng/ul

Date : 2025/02/05

DNA (156 ng/ul)	86 ul
10x TE	54 ul
dH_2O	397 ul
Total	537 ul

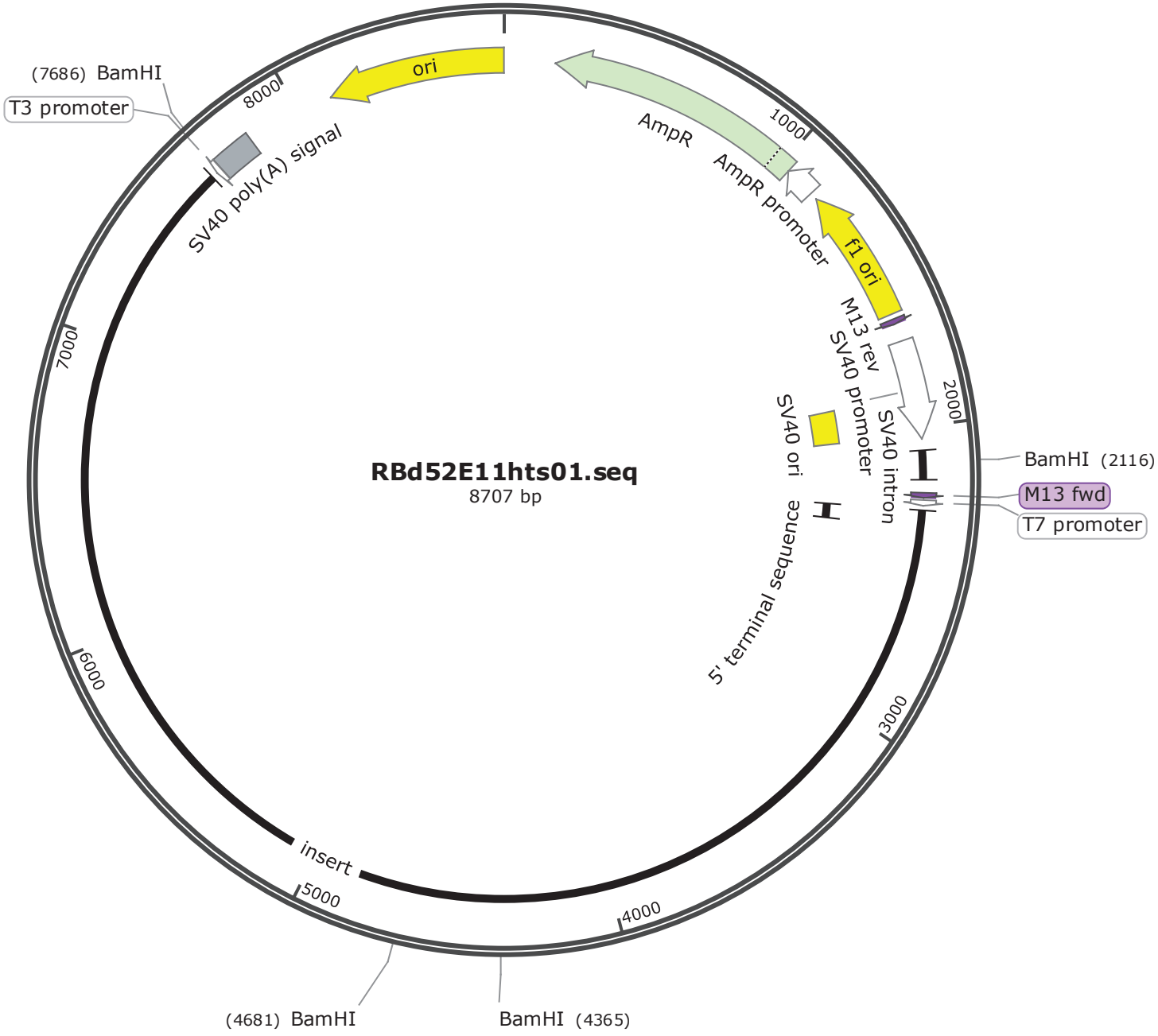
● Shipping

☑ Conc. : 25 ng/μl, Volume : 40 μl

☐ Conc. : __ ng/μl, Volume : __ μl

APPROVED BY : 検 '25.02.05 笹沼

http://dna.brc.riken.jp/index.html


RBd52E11hts01.seq
8707 bp
ori
AmpR
AmpR promoter
f1 ori
M13 rev
SV40 promoter
SV40 intron
SV40 ori
5' terminal sequence
SV40 poly(A) signal
T3 promoter
(7686) BamHI
BamHI (2116)
M13 fwd
T7 promoter
insert
(4681) BamHI
BamHI (4365)
1000
2000
3000
4000
5000
6000
7000
8000

BLAST Results

Questions/comments

Blast 2 sequences

Job title: ref|NM_012293.3|

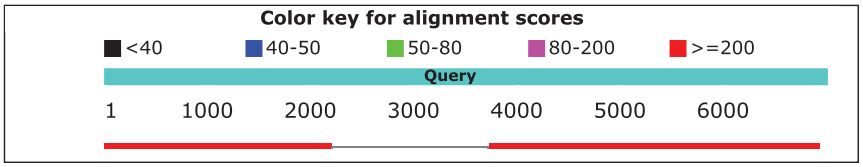
RID U5EW68HJ114 (Expires on 02-06 08:14 am)

Query ID	NM_012293.3	**Subject ID**	lcl|Query_2924055
Description	Homo sapiens peroxidasin (PXDN), mRNA	**Description**	None
Molecule type	nucleic acid		See details
Query Length	6817	**Molecule type**	dna
		Subject Length	8707
		Program	BLASTN 2.16.1+

RBd52E11hts01.seq

Graphic Summary

Distribution of the top 2 Blast Hits on 1 subject sequences



Dot Matrix View

Descriptions

Sequences producing significant alignments:

Description	Max Score	Total Score	Query Cover	E value	Per. Ident	Accession
None provided	5788	9791	78%	0.0	99.78%	Query_2924055

Alignments

Sequence ID: Query_2924055 Length: 8707 Number of Matches: 2
Range 1: 4465 to 7619

Score	Expect	Identities	Gaps	Strand	Frame
5788 bits(3134)	0.0()	3148/3155(99%)	0/3155(0%)	Plus/Plus	

Features:

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CDS:peroxidasin homo  1200  K  L  K  R  L  Y  G  S  T  L  N  I  D  L  F  P  A  L  V  V
Query                 3659  AACTGAAAAGGTTGTATGGCTCGACACTCAACATCGACCTGTTTCCGGCGCTCGTGGTGG  3718
Sbjct                 4465  ...G...C.A.....................................................  4524

CDS:peroxidasin homo  1220  E  D  L  V  P  G  S  R  L  G  P  T  L  M  C  L  L  S  T  Q
Query                 3719  AGGACCTGGTGCCTGGCAGCCGGCTGGGCCCCACCCTGATGTGTCTTCTCAGCACACAGT  3778
Sbjct                 4525  .....................................................  4584

CDS:peroxidasin homo  1240  F  K  R  L  R  D  G  D  R  L  W  Y  E  N  P  G  V  F  S  P
Query                 3779  TCAAGCGCCTGCGAGATGGGGACAGGTTGTGGTATGAGAACCCTGGGGTGTTCTCCCCGG  3838
Sbjct                 4585  .....................................................  4644

CDS:peroxidasin homo  1260  A  Q  L  T  Q  I  K  Q  T  S  L  A  R  I  L  C  D  N  A  D
Query                 3839  CCCAGCTGACTCAGATCAAGCAGACGTCGCTGGCCAGGATCCTATGCGACAACGCGGACA  3898
Sbjct                 4645  .....................................................  4704

CDS:peroxidasin homo  1280  N  I  T  R  V  Q  S  D  V  F  R  V  A  E  F  P  H  G  Y  G
Query                 3899  ACATCACCCGGGTGCAGAGCGACGTGTTCAGGGTGGCGGAGTTCCCTCACGGCTACGGCA  3958
Sbjct                 4705  .....................................................  4764

CDS:peroxidasin homo  1300  S  C  D  E  I  P  R  V  D  L  R  V  W  Q  D  C  C  E  D  C
Query                 3959  GCTGTGACGAGATCCCCAGGGTAGACCTCCGGGTGTGGCAGGACTGCTGTGAAGACTGTA  4018
Sbjct                 4765  ......................G..........................................  4824
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CDS:peroxidasin homo  1320  R  T  R  G  Q  F  N  A  F  S  Y  H  F  R  G  R  R  S  L  E
Query                 4019  GGACCAGGGGGCAGTTCAATGCCTTTTCCTATCATTTCCGAGGCAGACGGTCTCTTGAGT  4078
Sbjct                 4825  ............................................................  4884

CDS:peroxidasin homo  1340  F  S  Y  Q  E  D  K  P  T  K  K  T  R  P  R  K  I  P  S  V
Query                 4079  TCAGCTACCAGGAGGACAAGCCGACCAAGAAAACAAGACCACGGAAAATACCCAGTGTTG  4138
Sbjct                 4885  ............................................................  4944

CDS:peroxidasin homo  1360  G  R  Q  G  E  H  L  S  N  S  T  S  A  F  S  T  R  S  D  A
Query                 4139  GGAGACAGGGGGAACATCTCAGCAACAGCACCTCAGCCTTCAGCACACGCTCAGATGCAT  4198
Sbjct                 4945  ............................................................  5004

CDS:peroxidasin homo  1380  S  G  T  N  D  F  R  E  F  V  L  E  M  Q  K  T  I  T  D  L
Query                 4199  CTGGGACAAATGACTTCAGAGAGTTTGTTCTGGAAATGCAGAAGACCATCACAGACCTCA  4258
Sbjct                 5005  ............................................................  5064

CDS:peroxidasin homo  1400  R  T  Q  I  K  K  L  E  S  R  L  S  T  T  E  C  V  D  A  G
Query                 4259  GAACACAGATAAAGAAACTTGAATCACGGCTCAGTACCACAGAGTGCGTGGATGCCGGGG  4318
Sbjct                 5065  ............................................................  5124

CDS:peroxidasin homo  1420  G  E  S  H  A  N  N  T  K  W  K  K  D  A  C  T  I  C  E  C
Query                 4319  GCGAATCTCACGCCAACAACACCAAGTGGAAAAAAGATGCATGCACCATTTGTGAATGCA  4378
Sbjct                 5125  ............................................................  5184

CDS:peroxidasin homo  1440  K  D  G  Q  V  T  C  F  V  E  A  C  P  P  A  T  C  A  V  P
Query                 4379  AAGACGGGCAGGTCACCTGCTTCGTGGAAGCTTGCCCCCCTGCCACCTGTGCTGTCCCCG  4438
Sbjct                 5185  ............................................................  5244

CDS:peroxidasin homo  1460  V  N  I  P  G  A  C  C  P  V  C  L  Q  K  R  A  E  E  K  P
Query                 4439  TGAACATCCCAGGGGCCTGCTGTCCAGTCTGCTTACAGAAGAGGGCGGAGGAAAAGCCCT  4498
Sbjct                 5245  ............................................................  5304

Query                 4499  AGGCTCCTGGGAGGCTCCTCAGAGTTTGTCTGCTGTGCCATCGTGAGATCGGGTGGCCGA  4558
Sbjct                 5305  ............................................................  5364

Query                 4559  TGGCAGGGAGCTGCGGACTGCAGACCAGGAAACACCCAGAACTCGTGACATTTCATGACA  4618
Sbjct                 5365  ............................................................  5424

Query                 4619  ACGTCCAGCTGGTGCTGTTACAGAAGGCAGTGCAGGAGGCTTCCAACCAGAGCATCTGCG  4678
Sbjct                 5425  ............................................................  5484

Query                 4679  GAGAAGGAGGCACAGCAGGTGCCTGAAGGGAAGCAGGCAGGAGTCCTAGCTTCACGTTAG  4738
Sbjct                 5485  ............................................................  5544

Query                 4739  ACTTCTCAGGTTTTTATTTAATTCTTTTAAAATGAAAAATTGGTGCTACTATTAAATTGC  4798
Sbjct                 5545  ............................................................  5604

Query                 4799  ACAGTTGAATCATTTAGGCGCCTAAATTGATTTTGCCTCCCAACACCATTTCTTTTTAAA  4858
Sbjct                 5605  ..........................G.............................  5664

Query                 4859  TAAAGCAGGATACCTCTATATGTCAGCCTTGCCTTGTTCAGATGCCAGGAGCCGGCAGAC  4918
Sbjct                 5665  ............................................................  5724

Query                 4919  CTGTCACCCGCAGGTGGGGTGAGTCTTGGAGCTGCCAGAGGGGCTCACCGAAATCGGGGT  4978
Sbjct                 5725  ..........................C.............................  5784

Query                 4979  TCCATCACAAGCTATGTTTAAAAAGAAAATTGGTGTTTGGCAAACGGAACAGAACCTTTG  5038
Sbjct                 5785  ............................................................  5844
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Query                 5039  ATGAGAGCGTTCACAGGGACACTGTCTGGGGGTGCAGTGCAAGCCCCCGGCCTCTTCCCT  5098
Sbjct                 5845  ............................................................  5904

Query                 5099  GGGAACCTCTGAACTCCTCCTTCCTCTGGGCTCTCTGTAACATTTCACCACACGTCAGCA  5158
Sbjct                 5905  ............................................................  5964

Query                 5159  TCTAATCCCAAGACAAACATTCCCGCTGCTCGAAGCAGCTGTATAGCCTGTGACTCTCCG  5218
Sbjct                 5965  ............................................................  6024

Query                 5219  TGTGTCAGCTCCTTCCACACCTGATTAGAACATTCATAAGCCACATTTAGAAACAGGTTT  5278
Sbjct                 6025  ..........................................................A...  6084

Query                 5279  GCTTTCAGCTGTCACTTGCACACATACTGCCTAGTTGTGAACCAAATGTGAAAAAACCTC  5338
Sbjct                 6085  ............................................................  6144

Query                 5339  CTTCATCCCATTGTGTATCTGATACCTGCCGAGGGCCAAGGGTGTGTGTTGACAACGCCG  5398
Sbjct                 6145  ............................................................  6204

Query                 5399  CTCCCAGCCGGCCCTGGTTGCGTCCACGTCCTGAACAAGAGCCGCTTCCGGATGGCTCTT  5458
Sbjct                 6205  ............................................................  6264

Query                 5459  CCCAAGGGAGGAGGAGCTCAAGTGTCGGGAACTGTCTAACTTCAGGTTGTGTGAGTGCGT  5518
Sbjct                 6265  ............................................................  6324

Query                 5519  TaaaaaaaaaaaaaaaaaGAATCCCTATACCTCATTTGTATTTTTAAAATGCGTGATGT  5578
Sbjct                 6325  ............................................................  6384

Query                 5579  TTTATGAAATTGTGTCCATTTTTTAGGTATTAGATATGGCAGAAAAACCATTTCCACTAT  5638
Sbjct                 6385  ............................................................  6444

Query                 5639  GCAAAGTTCTTTTAGACGTCAGTGAAAATCAACTCTCATACCTCATGGTCTCTCTTTAAT  5698
Sbjct                 6445  ............................................................  6504

Query                 5699  TGACCAAAACCTTCCATTTTTCTCTAAATACAAAGCGATCTGTGTTCTGAGCAACCTTTC  5758
Sbjct                 6505  ............................................................  6564

Query                 5759  CCCGAACACACAGCTTCAGTGCAGCACGCTGACCTGAGTATCCACCATGTGCCAGGCACA  5818
Sbjct                 6565  ............................................................  6624

Query                 5819  GTGCTGGGCACACGAGGCACCAAGGTCCGGGCCACCTGCCCGCAGCAAGGCCCAGCTGAG  5878
Sbjct                 6625  ............................................................  6684

Query                 5879  GTGGTGGAGGGAGCCCCTGAGGTCAGGGGCCGTTTCGGTTCAGGGTGGCAGGTGTCCAGC  5938
Sbjct                 6685  ............................................................  6744

Query                 5939  ACTGGGGTATGGCGTCGAGGCTTCCATGGGGTGGGGGAGGCCAGCTTCCTTCTGACAGGA  5998
Sbjct                 6745  ............................................................  6804

Query                 5999  TGGGCGCATACAGTGCCTGGTGTGATTTGTGCACAACCCGTGTTCCAGGTGCACATCCTC  6058
Sbjct                 6805  ............................................................  6864

Query                 6059  CCAAGGAGACACCCAGACCCTTCCAGCACGGGCCGGCCAAGTTGCTGCGGCGGAGGCAGC  6118
Sbjct                 6865  ............................................................  6924

Query                 6119  ATTTCAGCTGTGAGGAAGGTCATTGGATTCATGTGTTTTATCTGTAAAAATGGTTGTCTT  6178
Sbjct                 6925  ............................................................  6984

Query                 6179  AACTTCTTAACCTCATATTGGTAAGTGATTGATAAAAATTGGTTGGTGTTTCATGACATG  6238
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Sbjct                6985 ..................................................  7044

Query                6239 TGGACTTCTTTTGAAATAGCAAGTCAAATGTAGTGACCAAATTGTGGAAGAGATTTCTGT  6298
Sbjct                7045 ..................................................  7104

Query                6299 CAAATAGGAAATGTGTAAGTTCGTCTAAAAGCTGATGGTTATGTAAGTTGCTCAGGCACT  6358
Sbjct                7105 ..................................................  7164

Query                6359 CAGATGACAGCAGATTCTGGGTTCTGGGAGTGTTCTGTGCCTCTTACATGCCCTGGAGGC  6418
Sbjct                7165 ..................................................  7224

Query                6419 CTCATGGTCTCAGTGCTGAGGCGGCACACCTGTAGCACACCTGCGTAATGTGCGGTCTGG  6478
Sbjct                7225 ..................................................  7284

Query                6479 GCCAGTCACAAGGAATTGTGTTGTCTAAGCCAAAGGGGGAAGCTGACTGTGATTTACCaa  6538
Sbjct                7285 ..................................................  7344

Query                6539 aaaaaaTTCTGTAATTCAAACCAAAATGTCTGCGGAATCACCAGTTTGATACTCTCTGTA  6598
Sbjct                7345 ..................................................  7404

Query                6599 ATCAGAACAGTGGGCAGTGCCTGGGTGAACGTGTCTAGCAGCCACTGTGCGGGATCGCTG  6658
Sbjct                7405 ..................................................  7464

Query                6659 TAACAGGAGTGGAATGTACATATTTATTTACTTTTCTAACTGCTCCAACAGCCAAATGCC  6718
Sbjct                7465 ..................................................  7524

Query                6719 TTTTTTATGACCATTGTATTCAGTTCATTACCAAAGAAATGTTTGCACTTTGTAATGATG  6778
Sbjct                7525 ..................................................  7584

Query                6779 CCTTTCAGTTCAAATAAATGGGTCACATTTTCAAA  6813
Sbjct                7585 ...................................  7619
```

Range 2: 2311 to 4477

Score	Expect	Identities	Gaps	Strand	Frame
4002 bits(2167)	0.0()	2167/2167(100%)	0/2167(0%)	Plus/Plus	

Features:

```
Query                   1 GCAGTCGGGAGCCGGCCGTGGTGGCTCCGTGCGTCCGAGCGTCCGTCCGCGCCGTCGGCC  60
Sbjct                2311 ..................................................  2370

CDS:peroxidasin homo    1  M  A  K  R  S  R  G  P  G  R  R  C  L  L  A  L  V  L  F  C
Query                  61 ATGGCCAAGCGCTCCAGGGGCCCCGGGCGCCGCTGCCTGTTGGCGCTCGTGCTGTTCTGC  120
Sbjct                2371 ..................................................  2430

CDS:peroxidasin homo   21  A  W  G  T  L  A  V  V  A  Q  K  P  G  A  G  C  P  S  R  C
Query                 121 GCCTGGGGGACGCTGGCCGTGGTGGCCCAGAAGCCGGGCGCAGGGTGTCCGAGCCGCTGC  180
Sbjct                2431 ..................................................  2490

CDS:peroxidasin homo   41  L  C  F  R  T  T  V  R  C  M  H  L  L  L  E  A  V  P  A  V
Query                 181 CTGTGCTTCCGCACCACCGTGCGCTGCATGCATCTGCTGCTGGAGGCCGTGCCCGCCGTG  240
Sbjct                2491 ..................................................  2550

CDS:peroxidasin homo   61  A  P  Q  T  S  I  L  D  L  R  F  N  R  I  R  E  I  Q  P  G
Query                 241 GCGCCGCAGACCTCCATCCTAGATCTTCGCTTTAACAGAATCAGAGAGATCCAACCTGGG  300
Sbjct                2551 ..................................................  2610
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CDS:peroxidasin homo   81  A  F  R  R  L  R  N  L  N  T  L  L  L  N  N  N  Q  I  K  R
Query                 301 GCATTCAGGCGGCTGAGGAACTTGAACACATTGCTTCTCAATAATAATCAGATCAAGAGG  360
Sbjct                2611 ..................................................  2670

CDS:peroxidasin homo  101  I  P  S  G  A  F  E  D  L  E  N  L  K  Y  L  Y  L  Y  K  N
Query                 361 ATACCTAGTGGAGCATTTGAAGACTTGGAAAATTTAAAATATCTCTATCTGTACAAGAAT  420
Sbjct                2671 ..................................................  2730

CDS:peroxidasin homo  121  E  I  Q  S  I  D  R  Q  A  F  K  G  L  A  S  L  E  Q  L  Y
Query                 421 GAGATCCAGTCAATTGACAGGCAAGCATTTAAGGGACTTGCCTCTCTAGAGCAACTATAC  480
Sbjct                2731 ..................................................  2790

CDS:peroxidasin homo  141  L  H  F  N  Q  I  E  T  L  D  P  D  S  F  Q  H  L  P  K  L
Query                 481 CTGCACTTTAATCAGATAGAAACTTTGGACCCAGATTCGTTCCAGCATCTCCCGAAGCTC  540
Sbjct                2791 ..................................................  2850

CDS:peroxidasin homo  161  E  R  L  F  L  H  N  N  R  I  T  H  L  V  P  G  T  F  N  H
Query                 541 GAGAGGCTATTTTTGCATAACAACCGGATTACACATTTAGTTCCAGGGACATTTAATCAC  600
Sbjct                2851 ..................................................  2910

CDS:peroxidasin homo  181  L  E  S  M  K  R  L  R  L  D  S  N  T  L  H  C  D  C  E  I
Query                 601 TTGGAATCTATGAAGAGATTGCGACTGGACTCAAACACACTTCACTGCGACTGTGAAATC  660
Sbjct                2911 ..................................................  2970

CDS:peroxidasin homo  201  L  W  L  A  D  L  L  K  T  Y  A  E  S  G  N  A  Q  A  A  A
Query                 661 CTGTGGTTGGCGGATTTGCTGAAAACCTACGCGGAGTCGGGGAACGCGCAGGCAGCGGCC  720
Sbjct                2971 ..................................................  3030

CDS:peroxidasin homo  221  I  C  E  Y  P  R  R  I  Q  G  R  S  V  A  T  I  T  P  E  E
Query                 721 ATCTGTGAATATCCCAGACGCATCCAGGGACGCTCAGTGGCAACCATCACCCCGGAAGAG  780
Sbjct                3031 ..................................................  3090

CDS:peroxidasin homo  241  L  N  C  E  R  P  R  I  T  S  E  P  Q  D  A  D  V  T  S  G
Query                 781 CTGAACTGTGAAAGGCCCCGGATCACCTCCGAGCCCCAGGACGCAGATGTGACCTCGGGG  840
Sbjct                3091 ..................................................  3150

CDS:peroxidasin homo  261  N  T  V  Y  F  T  C  R  A  E  G  N  P  K  P  E  I  I  W  L
Query                 841 AACACCGTGTACTTCACCTGCAGAGCCGAAGGCAACCCCAAGCCTGAGATCATCTGGCTG  900
Sbjct                3151 ..................................................  3210

CDS:peroxidasin homo  281  R  N  N  N  E  L  S  M  K  T  D  S  R  L  N  L  L  D  D  G
Query                 901 CGAAACAATAATGAGCTGAGCATGAAGACAGATTCCCGCCTAAACTTGCTGGACGATGGG  960
Sbjct                3211 ..................................................  3270

CDS:peroxidasin homo  301  T  L  M  I  Q  N  T  Q  E  T  D  Q  G  I  Y  Q  C  M  A  K
Query                 961 ACCCTGATGATCCAGAACACACAGGAGACAGACCAGGGTATCTACCAGTGCATGGCAAAG 1020
Sbjct                3271 ..................................................  3330

CDS:peroxidasin homo  321  N  V  A  G  E  V  K  T  Q  E  V  T  L  R  Y  F  G  S  P  A
Query                1021 AACGTGGCCGGAGAGGTGAAGACGCAAGAGGTGACCCTCAGGTACTTCGGGTCTCCAGCT 1080
Sbjct                3331 ..................................................  3390

CDS:peroxidasin homo  341  R  P  T  F  V  I  Q  P  Q  N  T  E  V  L  V  G  E  S  V  T
Query                1081 CGACCCACTTTTGTAATCCAGCCACAGAATACAGAGGTGCTGGTTGGGGAGAGCGTCACG 1140
Sbjct                3391 ..................................................  3450

CDS:peroxidasin homo  361  L  E  C  S  A  T  G  H  P  P  P  R  I  S  W  T  R  G  D  R
Query                1141 CTGGAGTGCAGCGCCACAGGCCACCCCCCGCCGCGGATCTCCTGGACGAGAGGTGACCGC 1200
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Sbjct                3451  ..................................................  3510

CDS:peroxidasin homo 381   T  P  L  P  V  D  P  R  V  N  I  T  P  S  G  G  L  Y  I  Q
Query                1201  ACACCCTTGCCAGTTGACCCGCGGGTGAACATCACGCCTTCTGGCGGGCTTTACATACAG  1260
Sbjct                3511  ..................................................  3570

CDS:peroxidasin homo 401   N  V  V  Q  G  D  S  G  E  Y  A  C  S  A  T  N  N  I  D  S
Query                1261  AACGTCGTACAGGGGGACAGCGGAGAGTATGCGTGCTCTGCGACCAACAACATTGACAGC  1320
Sbjct                3571  ..................................................  3630

CDS:peroxidasin homo 421   V  H  A  T  A  F  I  I  V  Q  A  L  P  Q  F  T  V  T  P  Q
Query                1321  GTCCATGCCACCGCTTTCATCATCGTCCAGGCTCTTCCTCAGTTCACTGTGACGCCTCAG  1380
Sbjct                3631  ..................................................  3690

CDS:peroxidasin homo 441   D  R  V  V  I  E  G  Q  T  V  D  F  Q  C  E  A  K  G  N  P
Query                1381  GACAGAGTCGTTATTGAGGGCCAGACCGTGGATTTCCAGTGTGAAGCCAAGGGCAACCCG  1440
Sbjct                3691  ..................................................  3750

CDS:peroxidasin homo 461   P  P  V  I  A  W  T  K  G  G  S  Q  L  S  V  D  R  R  H  L
Query                1441  CCGCCCGTCATCGCCTGGACCAAGGGAGGGAGCCAGCTCTCCGTGGACCGGCGGCACCTG  1500
Sbjct                3751  ..................................................  3810

CDS:peroxidasin homo 481   V  L  S  S  G  T  L  R  I  S  G  V  A  L  H  D  Q  G  Q  Y
Query                1501  GTCCTGTCATCGGGAACACTTAGAATCTCTGGTGTTGCCCTCCACGACCAGGGCCAGTAC  1560
Sbjct                3811  ..................................................  3870

CDS:peroxidasin homo 501   E  C  Q  A  V  N  I  I  G  S  Q  K  V  V  A  H  L  T  V  Q
Query                1561  GAATGCCAGGCTGTCAACATCATCGGCTCCCAGAAGGTCGTGGCCCACCTGACTGTGCAG  1620
Sbjct                3871  ..................................................  3930

CDS:peroxidasin homo 521   P  R  V  T  P  V  F  A  S  I  P  S  D  T  T  V  E  V  G  A
Query                1621  CCCAGAGTCACCCCAGTGTTTGCCAGCATTCCCAGCGACACAACAGTGGAGGTGGGCGCC  1680
Sbjct                3931  ..................................................  3990

CDS:peroxidasin homo 541   N  V  Q  L  P  C  S  S  Q  G  E  P  E  P  A  I  T  W  N  K
Query                1681  AATGTGCAGCTCCCGTGCAGCTCCCAGGGCGAGCCCGAGCCAGCCATCACCTGGAACAAG  1740
Sbjct                3991  ..................................................  4050

CDS:peroxidasin homo 561   D  G  V  Q  V  T  E  S  G  K  F  H  I  S  P  E  G  F  L  T
Query                1741  GATGGGGTTCAGGTGACAGAAAGTGGAAAATTTCACATCAGCCCTGAAGGATTCTTGACC  1800
Sbjct                4051  ..................................................  4110

CDS:peroxidasin homo 581   I  N  D  V  G  P  A  D  A  G  R  Y  E  C  V  A  R  N  T  I
Query                1801  ATCAATGACGTTGGCCCTGCAGACGCAGGTCGCTATGAGTGTGTGGCCCGGAACACCATT  1860
Sbjct                4111  ..................................................  4170

CDS:peroxidasin homo 601   G  S  A  S  V  S  M  V  L  S  V  N  V  P  D  V  S  R  N  G
Query                1861  GGGTCGGCCTCGGTGAGCATGGTGCTCAGTGTGAATGTTCCTGACGTCAGTCGAAATGGA  1920
Sbjct                4171  ..................................................  4230

CDS:peroxidasin homo 621   D  P  F  V  A  T  S  I  V  E  A  I  A  T  V  D  R  A  I  N
Query                1921  GATCCGTTTGTAGCTACCTCCATCGTGGAAGCGATTGCGACTGTTGACAGAGCTATAAAC  1980
Sbjct                4231  ..................................................  4290

CDS:peroxidasin homo 641   S  T  R  T  H  L  F  D  S  R  P  R  S  P  N  D  L  L  A  L
Query                1981  TCAACCCGAACACATTTGTTTGACAGCCGTCCTCGTTCTCCAAATGATTTGCTGGCCTTG  2040
Sbjct                4291  ..................................................  4350

CDS:peroxidasin homo 661   F  R  Y  P  R  D  P  Y  T  V  E  Q  A  R  A  G  E  I  F  E



Query                2041  TTCCGGTATCCGAGGGATCCTTACACAGTTGAACAGGCACGGGCGGGAGAAATCTTTGAA  2100
Sbjct                4351  ..................................................  4410

CDS:peroxidasin homo 681   R  T  L  Q  L  I  Q  E  H  V  Q  H  G  L  M  V  D  L  N  G
Query                2101  CGGACATTGCAGCTCATTCAGGAGCATGTACAGCATGGCTTGATGGTCGACCTCAACGGA  2160
Sbjct                4411  ..................................................  4470

CDS:peroxidasin homo 701   T  S
Query                2161  ACAAGTT  2167
Sbjct                4471  .......  4477
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