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*[Continued on next page]*

(54) Title: POLYNUCLEOTIDES ENCODING HUMAN PHOSPHATASES

**BMY_HPP1_A**

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                .         .         .         .         .         .
  1 CTAGTTTACT TCTACAATTT CGGATGGAAG GATTATGGTG TAGCGTCTCT TACTACTATC 60
  1 L  V  Y  F   Y  N  F   G  W  K   D  Y  G  V   A  S  L   T  T  I   20

                .         .         .         .         .         .
 61 CTAGATATGG TGAAGGTGAT GACATTTGCC TTACAGGAAG GAAAAGTAGC TATCCATTGT 120
 21 L  D  M  V   K  V  M   T  F  A   L  Q  E  G   K  V  A   I  H  C   40

                .         .
121 CATGCAGGGC TTGGTCGAAC AGGT 144
 41 H  A  G  L   G  R  T   G   48
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**BMY_HPP1_B**

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      .         .
  1 GATGTCTTCT GGGCCCTCCT GTGGAACACA GTT 33
  1 D  V  F  W   A  L  L   W  N  T   V   11
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(57) Abstract: The present invention provides novel polynucleotides encoding human phosphatase polypeptides, fragments and homologues thereof. Also provided are vectors, host cells, antibodies, and recombinant and synthetic methods for producing said polypeptides. The invention further relates to diagnostic and therapeutic methods for applying these novel human phosphatase polypeptides to the diagnosis, treatment, and/or prevention of various diseases and/or disorders related to these polypeptides, particularly cardiovascular diseases and/or disorders. The invention further relates to screening methods for identifying agonists and antagonists of the polynucleotides and polypeptides of the present invention.

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