~~WHAT IS CLAIMED IS:~~ CLAIMS

1. A monoclonal antibody that specifically binds an N-terminal region or a C-terminal region of human progastrin (hPG~~).~~), wherein:

   ~~The monoclonal~~the N-terminal region of hPG corresponds to residues 1-40 of SEQ ID NO:20;

   the C-terminal region of hPG corresponds to residues 41-80 of SEQ ID NO:20;

   the antibody ~~of claim 1 that~~does not detectably bind to an amidated gastrin 17, glycine-extended gastrin 17, amidated gastrin 34, glycine-extended gastrin 34, and C-terminal Flanking Peptide (CTFP), and

   ~~2.~~ the antibody is obtainable using:

   (i) ~~an immunogen comprising~~ a peptide antigen having an amino acid sequence corresponding to SEQ ID NO:25, or

   (ii) ~~an immunogen comprising~~ a peptide antigen having an amino acid sequence corresponding to SEQ ID NO:27.

~~3.~~2. The monoclonal antibody of ~~any one of claims~~**claim** **1** ~~-2~~, said antibody being selected in the group consisting of:

- A monoclonal antibody produced by an hybridoma chosen between the hybridoma CNCM I-4371, the hybridoma CNCM I-4372, the hybridoma CNCM I-4373, the hybridoma CNCM I-4374, the hybridoma CNCM I-4375, and the hybridoma CNCM I-4376, all deposited in accordance with the Treaty of Budapest on October 6, 2010 by the Collection Nationale de Cultures de Microorganisms (CNCM), Institut Pasteur, Paris, France; and
- A monoclonal antibody comprising VL and VH CDRs having sequences selected from one of the following groups of VL and VH CDR sequences:

(i) V_H CDR1.3 comprising the amino acid sequence of SEQ ID NO: 1, V_H CDR 2.3 comprising the amino acid sequence of SEQ ID NO: 2, V_H CDR 3.3 comprising the amino acid sequence of SEQ ID NO: 3, V_L CDR 1.3 comprising the amino acid sequence of SEQ ID NO: 4, V_L CDR 2.3 comprising the amino acid sequence of SEQ ID NO: 5, and V_L CDR 3.3 comprising the amino acid sequence of SEQ ID NO: 6;

(ii) V_H CDR 1.4 comprising the amino acid sequence of SEQ ID NO: 7, V_H CDR 2.4 comprising the amino acid sequence of SEQ ID NO: 8, V_H CDR 3.4 comprising the amino acid sequence of SEQ ID NO: 9, V_L CDR 1.4 comprising the amino acid sequence of SEQ ID NO: 10, V_L CDR 2.4 comprising the amino acid sequence of SEQ ID NO: 5, and V_L CDR 3.4 comprising the amino acid sequence of SEQ ID NO: 11;

(iii) V_H CDR 1.16 comprising the amino acid sequence of SEQ ID NO: 39, V_H CDR 2.16 comprising the amino acid sequence of SEQ ID NO: 43, V_H CDR 3.16 comprising the amino acid sequence of SEQ ID NO: 47, V_L CDR 1.16 comprising the amino acid sequence of SEQ ID NO: 50, V_L CDR 2.16 comprising the amino acid sequence of SEQ ID NO: 53, and V_L CDR 3.16 comprising the amino acid sequence of SEQ ID NO: 57;

(iv) V_H CDR 1.19 comprising the amino acid sequence of SEQ ID NO: 40, V_H CDR 2.19 comprising the amino acid sequence of SEQ ID NO: 44, V_H CDR 3.19 comprising the amino acid sequence of SEQ ID NO: 48, V_L CDR 1.19 comprising the amino acid sequence of SEQ ID NO: 51, V_L CDR 2.19 comprising the amino acid sequence of SEQ ID NO: 54, and V_L CDR 3.19 comprising the amino acid sequence of SEQ ID NO: 58; and

(v) VH CDR 1.13 comprising the amino acid sequence of SEQ ID NO: 38, VH CDR 2.13 comprising the amino acid sequence of SEQ ID NO: 42, VH CDR 3.13 comprising the amino acid sequence of SEQ ID NO: 46, VL CDR 1.13 comprising the amino acid sequence of SEQ ID NO: 50, VL CDR 2.13 comprising the amino acid sequence of SEQ ID NO: 53, and VL CDR 3.13 comprising the amino acid sequence of SEQ ID NO: 56.

~~4.~~3. The monoclonal antibody of any one of **claims 1-~~3~~2**, wherein said anti-hPG monoclonal antibody comprises VH and VL chains having sequences selected from one of the following groups of VH and VL sequences:

(i) ~~mV_H 3 (~~SEQ ID NO:12 (mV_H 3) and ~~mV_L 3 (~~SEQ ID NO:13 (mV_L 3);

(ii) ~~mV_H 4 (~~SEQ ID NO:14 (mV_H 4) and ~~mV_L 4 (~~SEQ ID NO:15 (mV_L 4);

(iii) ~~mV_H 16 (~~SEQ ID NO:61 (mV_H 16) and ~~mV_L 16 (~~SEQ ID NO:65 (mV_L 16);

(iv) ~~mV_H 19 (~~SEQ ID NO:62 (mV_H 19) and ~~mV_L 19 (~~SEQ ID NO:66 (mV_L 19); and

(v) ~~mV_H 13 (~~SEQ ID NO:60 (mV_H 13) and ~~mV_L 13 (~~SEQ ID NO:64 (mV_L 13).

~~5.~~4. The monoclonal antibody of any one of **claims 1-~~4~~2**, which is humanized.

~~6.~~5. The monoclonal antibody of **claim** ~~5 which comprises~~4, said antibody comprising V_H and V_L chains having sequences selected from one of the following groups of V_H and V_L sequences:

~~(vi)~~(i) ~~hVH 3 (~~SEQ ID NO:21 (hV_H 3) and ~~hVL 3 (~~SEQ ID NO:22 (hV_L 3);

~~(vii)~~(ii) ~~hVH 4 (~~SEQ ID NO:23 (hV_H 4) and ~~hVL 4 (~~SEQ ID NO:24 (hV_L 4);

~~(viii)~~(iii) ~~hVH 16a (~~SEQ ID NO:84 (hV_H 16a) and ~~hVL 16a (~~SEQ ID NO:85 (hV_L 16a);

~~(ix)~~(iv) ~~hVH 16b (~~SEQ ID NO:86 (hV_H 16b) and ~~hVL 16b (~~SEQ ID NO:87 (hV_L 16b);

~~(x)~~(v) ~~hVH 16c (~~SEQ ID NO:88 (hV_H 16c) and ~~hVL 16c (~~SEQ ID NO:89 (hV_L 16c);

~~(xi)~~(vi) ~~hVH 19a (~~SEQ ID NO:90 (hV_H 19a) and ~~hVL 19a (~~SEQ ID NO:91 (hV_L 19a);

~~(xii)~~(vii) ~~hVH 196b (~~SEQ ID NO:92 (hV_H 19b) and ~~hVL 19b (~~SEQ ID NO:93 (hV_L 19b);

~~(xiii)~~(viii) ~~hVH 19c (~~SEQ ID NO:94 (hV_H 19c) and ~~hVL 19c (~~SEQ ID NO:95 (hV_L 19c);

~~(xiv)~~(ix) ~~hVH 13a (~~SEQ ID NO:80 (hV_H 13a) and ~~hVL 13a (~~SEQ ID NO:81 (hV_L 13a); and

~~(xv)~~(x) ~~hVH 13b (~~SEQ ID NO:82 (hV_H 13b) and ~~hVL 13b (~~SEQ ID NO:83 (hV_L 13b).

~~7.~~6. The monoclonal antibody of any one of **claims 1-~~6~~5** that binds to:

(i) an epitope comprising an amino acid sequence corresponding to a sequence selected from the group consisting of SEQ ID NOs:28, 29, 30, 31, and 32, or

(ii) an epitope comprising an amino acid sequence corresponding to a sequence selected from the group consisting of SEQ ID NOs:33, 34, 35, and 36.

~~8.~~7. A pharmaceutical composition comprising a monoclonal antibody according to any one of **claims 1-~~7~~6** and an excipient, carrier, and/or diluent.

8. A first polynucleotide encoding a variable light chain (V_L) ~~for~~and a second polynucleotide encoding a variable heavy chain (V_H) of an anti-hPG monoclonal antibody of claims 1-6; or a single polynucleotide encoding both variable light and heavy chains (V_L and V_H), of an anti-hPG monoclonal antibody according to any one of **claims 1-~~7 and/or a variable heavy chain (VH) for~~6.**

9. An expression vector comprising a first polynucleotide encoding a variable light chain (V_L) and a second polynucleotide encoding a variable heavy chain (V_H) of an anti-hPG monoclonal antibody of claims 1-6; or a single polynucleotide encoding

both variable light and heavy chains (V_L and V_H), of an anti-hPG monoclonal antibody according to any one of **claims 1-~~7.~~ 6.**

~~10. An expression vector comprising a polynucleotide according to **claim 9.**~~

~~11.~~10. A host cell transformed with ~~pairs of polynucleotides suitable for expressing~~a first polynucleotide encoding a variable light chain (V_L) and a second polynucleotide encoding a variable heavy chain (V_H) of an anti-hPG monoclonal antibody of claims 1-6; or a single polynucleotide encoding both variable light and heavy chains (V_L and V_H), of an anti-hPG monoclonal antibody according to any one of **claims 1-~~7~~6**.

~~12.~~11. A method of producing an anti-hPG monoclonal antibody comprising:

(a) culturing the host cell of **claim ~~11~~10** under suitable conditions and
(b) recovering the anti-hPG monoclonal antibody from the culture medium or the ~~hybridoma cells~~host cell.

~~13.~~12. The use of an anti-hPG monoclonal antibody according to any one of **claims 1-~~7~~6** ~~for making~~in the manufacture of a medicament for treating colorectal cancer.

~~14. The use of an anti-hPG monoclonal antibody according to any one of **claims 1-7** for inhibiting proliferation of colorectal tumor cells.~~

~~15.~~13. A kit useful for detecting hPG, comprising:

(i) an N-terminal anti-hPG monoclonal antibody according to any one of **claims 1-~~7~~6** and an antibody that specifically binds a C-terminal region of hPG; or
(ii) a C-terminal anti-hPG monoclonal antibody according to any one ~~claim~~of claims **1-~~7~~6** and an antibody that specifically binds an N-terminal region of hPG.

~~16.~~14. The kit of **claim ~~15~~13**, wherein:

- the antibody that specifically binds a C-terminal region of hPG of (i) is a polyclonal antibody; or
- the antibody that specifically binds an N-terminal region of hPG of (ii) is a polyclonal antibody.

~~17. A method of diagnosing colorectal cancer in a subject, comprising quantifying the amount of progastrin in a serum sample from the subject using at least one~~

~~monoclonal antibody according to any one of **claims 1-7**, wherein a quantity of progastrin in a range of about 20 to 400 pM is indicative of colorectal cancer.~~

~~18. A method of selecting a patient suitable for anti-hPG therapy, comprising quantifying the amount of progastrin in a serum sample from a patient with colorectal cancer, using at least one monoclonal antibody according to anyone of **claims 1-7**, wherein a quantity of progastrin in a range of about 20 to 400 pM is indicative of suitability for anti-hPG therapy.~~

~~19. A method of monitoring the effectiveness of a colorectal cancer treatment, comprising quantifying the blood progastrin level of a subject who is being treated for colorectal cancer, as a function of time, using at least one monoclonal antibody according to anyone of **claims 1-7**, where a time-dependent decrease in the subject's serum progastrin level indicates the treatment is effective.~~

~~20. The use of an anti-PG monoclonal antibody according to any one of **claims 1-7** for inhibiting a progastrin-dependent signal transduction cascade in a cell.~~

15. A hybridoma capable of secreting an anti-hPG monoclonal antibody according to anyone of **claims 1-~~7~~6**, wherein said hybridoma is chosen between the hybridoma CNCM I-4371, the hybridoma CNCM I-4372, the hybridoma CNCM I-4373, the hybridoma CNCM I-4374, the hybridoma CNCM I-4375, and the hybridoma CNCM I-4376, all deposited in accordance with the Treaty of Budapest on October 6, 2010 by the Collection Nationale de Cultures de Microorganisms (CNCM), Institut Pasteur, Paris, France.

~~21.~~