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(54) **Title:** MONOCLONAL ANTIBOLIES TO PROGASTRIN

(57) **Abstract:** The present invention provides progastrin-binding molecules specific for progastrin that do not bind gastrin-17(G17), gastrin-34(G34), glycine-extended gastrin-17(G17-Gly), or glycine-extended gastrin-34(G34-Gly). Further, the invention provides monoclonal antibodies (MAbs) selective for sequences at the N-terminus and the C-terminus of the gastrin precursor molecule, progastrin and the hybridomas that produce these MAbs. Also provided are panels of MAbs useful for the detection and quantitation of progastrin and gastrin hormone species in immuno- detection and quantitation assays. These assays are useful for diagnosing and monitoring a gastrin-promoted disease or condition, or for monitoring the progress of a course of therapy. The invention further provides solid phase assays including immunohistochemical (IHC) and immunofluorescence (IF) assays suitable for detection and visualization of gastrin species in solid samples, such as biopsy samples or tissue slices. The progastrin-binding molecules are useful therapeutically for passive immunization against progastrin in progastrin-promoted diseases or conditions. Also provided are surrogate reference standard (SRS) molecules that are peptide chains of from about 10 to about 35 amino acids, wherein the SRS molecule comprises at least two epitopes found in a protein of interest of greater than about 50 amino acids. Such SRS molecules are useful as standards in place of authentic proteins of interest.

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