

PRODUCT NAME AND CLONE:	Monoclonal antibody to <b>Pepsinogen I</b> , Clone 4C6.1
HOST:	Mouse
IMMUNOGEN:	Monoclonal antibody to pepsinogen I is derived from the hybridoma produced by fusion between myeloma cells and Balb/c spleen cells. Pepsinogen I purified from human tissue was used as an immunogen.
CLASS AND SUBCLASS:	IgG <sub>1</sub>
PRODUCT SPECIFICITY:	The antibody is specific to human pepsinogen I and has no cross reactivity to human pepsinogen II
PRODUCT CODE:	610055: 100 µg/ml vial 1ml 610059: 100 µg/ml vial 10ml
PRODUCT BUFFER:	PBS solution containing 1.0% (w/v) BSA and 0.09% (w/v) NaN <sub>3</sub>
STORAGE:	+2...+8°C
APPLICATIONS:	Immunohistochemical staining, Western blotting and enzyme-immunoassays

Pepsinogen I is a group of precursor molecules for pepsin. These proteins are solely synthesized and secreted into gastric lumen by chief (pepsin) cells and mucous neck cells in the gastric corpus (oxyntic mucosa). In atrophic corpus gastritis these cells disappear resulting in a decrease of the serum level of pepsinogen I and in a reduction of the number of pepsinogen I positive cells in gastric biopsies. The presence of positive immunostaining for pepsinogen I is a highly reliable sign for the acid-secreting oxyntic glands. In gastric heterotopia of the duodenal bulb, but not in gastric metaplasia, the oxyntic-type glands give a positive immunohistochemical reaction for pepsinogen I.

- REFERENCES:
1. Varis K. Surveillance of pernicious anemia. In Precancerous Lesions of the Gastrointestinal Tract. Scherlock P, Morson PC, Barbara L, Veronesi U (eds), Raven Press, New York, 189-194, 1983.
  2. Sipponen P, Kekki M, Haapakoski J, Ihamäki T, Siurala M. Gastric cancer risk in chronic atrophic gastritis: statistical calculations of cross sectional data. Int. J. Cancer, 35: 173-177, 1985.
  3. Borch K, Axelsson CK, Halgreen H, Damkjaer Nielsen MD, Ledin T, Szesci PB. The ratio of pepsinogen A to pepsinogen C: a sensitive test for atrophic gastritis. Scand. J. Gastroenterol., 24: 870-876, 1989.
  4. Varis K, Sipponen P, Laxén F, Samloff MI, Huttunen J, Taylor PR, Heinonen OP, Albanes D, Sande N, Virtamo V, Härkönen M, Helsinki Gastritis Study Group. Serum pepsinogen I in screening of atrophic corpus gastritis. Implications in early endoscopic diagnosis of gastric cancer and dysplasia. Scand. J. Gastroenterol., 2000.
  5. Miki K, Ichinose M, Ishikawa KB, Yahagi N, Matsushima M, Kakei N, Tsukada S, Kido M, Ishihama S, Shimizu Y, Suzuki T, Kurokawa K. Clinical application of serum pepsinogen I and II levels for mass screening to detect gastric cancer. Jpn. J. Cancer Res., 84: 1086-1090, 1993.

For research use and further manufacturing only.

610055 Pepsinogen I ver 004