

POLYCLONAL ANTIBODY

# Anti-GST-P pAb

Code No.	Subclass	Quantity	Form
311-H	Rabbit IgG	6 mL	Ready-to-use

**BACKGROUND:** Placental glutathione S-transferase (GST-P), a member of glutathione S-transferase, is known for its specific expression during rat hepatocarcinogenesis and has been used as a reliable tumor marker for experimental rat hepatocarcinogenesis.

**SOURCE:** This antibody was purified from rabbit serum using protein A agarose. The rabbit was immunized with purified rat liver glutathione S-transferase P.

**FORMULATION:** 6 mL of pre-diluted antibody with PBS containing 2% FCS, and 0.09% NaN<sub>3</sub>\*.

\*Azide may react with copper or lead in plumbing system to form explosive metal azides. Therefore, always flush plenty of water when disposing materials containing azide into drain.

**STORAGE:** This antibody solution is stable for 3 years from the date of manufacture when stored at 4°C.

**REACTIVITY:** This antibody reacts with Glutathione S-transferase P on Immunohistochemistry.

**APPLICATIONS:**

Western blotting; Not tested

Immunoprecipitation; Not tested

Immunohistochemistry; Ready-to-use

This antibody can be used for staining of frozen sections and paraffin sections.

Immunocytochemistry; Not tested

Flow cytometry; Not tested

Detailed procedure is provided in the following **PROTOCOL**.

**SPECIES CROSS REACTIVITY:**

Species	Human	Mouse	Rat
Tissues	Stomach	Not tested	Precancerous liver
Reactivity on IHC	+		+

**RELATED PRODUCTS:**

Please visit our website at <https://ruo.mbl.co.jp/>.

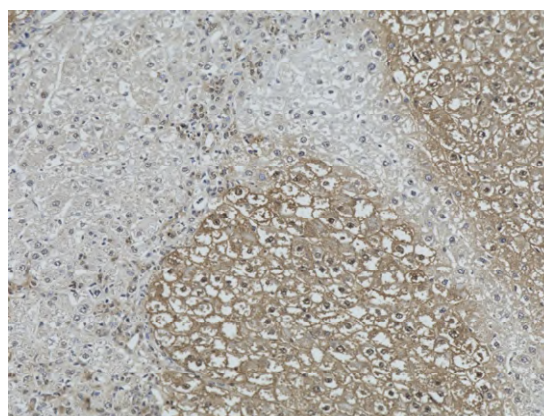
**INTENDED USE:**

For Research Use Only. Not for use in diagnostic procedures.

**REFERENCES:**

- 1) Suzuki, R., *et al.*, *Carcinogenesis* **27**, 619-630 (2006)
- 2) Ueno, S., *et al.*, *Clin. Cancer Res.* **11**, 5645-5650 (2005)
- 3) Hasumura, M., *et al.*, *Toxicol. Sci.* **86**, 61-67 (2005)
- 4) Sukata, T., *et al.*, *Am. J. Pathol.* **165**, 1479-1488 (2004)
- 5) Suzuki, S., *et al.*, *Carcinogenesis* **25**, 439-443 (2004)
- 6) Nakaji, M., *et al.*, *Carcinogenesis* **25**, 389-397 (2004)
- 7) Oyama, K., *et al.*, *Carcinogenesis* **23**, 885-892 (2002)
- 8) Denda, A., *et al.*, *Carcinogenesis* **23**, 245-256 (2002)
- 9) Yan, Y., *et al.*, *Carcinogenesis* **23**, 189-196 (2002)
- 10) Zeng, Z-Z., *et al.*, *Cancer Res.* **60**, 2876-2881 (2000)
- 11) Ledda-Columbano, G. M., *et al.*, *Carcinogenesis* **20**, 2299-2304 (1999)
- 12) Kobayashi, Y., *et al.*, *Carcinogenesis* **19**, 1809-1814 (1998)
- 13) Denda, A., *et al.*, *Carcinogenesis* **18**, 1921-1930 (1997)
- 14) Endoh, T., *et al.*, *Carcinogenesis* **17**, 467-475 (1996)
- 15) Sato, K., *et al.*, *PNAS* **82**, 3964-3968 (1985)

This antibody is used in reference number 1) - 14).



**Immunohistochemical detection of GST-P in paraffin-embedded section of precancerous rat liver with 311-H.**

The descriptions of the following protocols are examples.  
Each user should determine the appropriate condition.

**PROTOCOL:**

**Immunohistochemical staining for paraffin embedded sections**

- 1) Deparaffinize the sections with Xylene 3 times for 3-5 minutes each.
- 2) Wash the slides with Ethanol 3 times for 3-5 minutes each.
- 3) Wash the slides with PBS 3 times for 3-5 minutes each.
- 4) Remove the slides from PBS, wipe gently around each section and cover tissues with 3% H<sub>2</sub>O<sub>2</sub> for 10 minutes at room temperature to block endogenous peroxidase activity.
- 5) Wash twice in PBS for 5 minutes each.
- 6) Remove the slides from PBS, wipe gently around each section and cover tissues with Blocking buffer (20 mM HEPES, 1% BSA, 135 mM NaCl, pH 7.2) for 5 minutes to block non-specific staining. Do not wash.
- 7) Tip off the blocking buffer, wipe gently around each section and cover tissues with primary antibody.
- 8) Incubate the sections for 1 hour at room temperature.
- 9) Wash the slides twice in PBS for 5 minutes each.
- 10) Wipe gently around each section and cover tissues with Histostar™ (Ms + Rb) (MBL, code no. 8460). Incubate for 1 hour at room temperature.
- 11) Wash the slides twice in PBS for 5 minutes each.
- 12) Visualize by reacting for 1 minute with Histostar™ DAB (MBL, code no. 8469) at room temperature. \*DAB is a suspect carcinogen and must be handled with care. Always wear gloves.
- 13) Wash the slides in water for 5 minutes.
- 14) Counter stain in hematoxylin for 3 minutes, and then wash the slides 3 times in water for 5 minutes each.
- 15) Dehydrate by immersing in Ethanol 4 times for 3 minutes each, followed by immersing in Xylene twice for 3 minutes each.
- 16) Now ready for mounting.

(Positive control for Immunohistochemistry; rat liver, human stomach)