

**Mouse Anti-GSTP1 [3F2]: MC0976**

**Intended Use:** For Research Use Only

**Description:** Glutathione S-transferases (GSTs) are a family of isoenzymes that detoxify electrophiles through conjugation to thiol-reduced glutathione (GSH). Thus, they are critical in protecting cells from toxins (drugs, pesticides, carcinogens) and oxidative stress. Eight isoforms of cytosolic-soluble GSTs ( $\alpha$ ,  $\kappa$ ,  $\mu$ ,  $\pi$ ,  $\sigma$ ,  $\theta$ ,  $\zeta$ , and  $\omega$ ) are identified, while only GST- $\alpha$ , - $\mu$ , and - $\pi$  are described in the central nervous system. GSTP1 (GST $\pi$ ) is overexpressed in early stages of carcinogenesis and can be used as a neoplastic marker in tumor tissues. GSTP1 directly inhibits TRAF2 and JNK but not NF- $\kappa$ B. GSTP1 polymorphisms affect substrate selectivity and stability, and the oxidative milieu in dopaminergic neurons, which increases the susceptibility to Parkinson's disease. Adenocarcinomas of the stomach, kidney, uterus and ovary, as well as squamous cell tumors of the head and neck, melanomas, and carcinoid tumors of the lung all demonstrate reactivity with this antibody.

**Specifications:**

Clone: 3F2  
Source: Mouse  
Isotype: IgG1  
Reactivity: Human, monkey  
Localization: Nucleus, cytoplasm  
Formulation: Antibody in PBS pH7.4, containing BSA, glycerol, and  $\leq 0.09\%$  sodium azide (NaN<sub>3</sub>).  
Storage: Store at 2°- 8°C. For longer periods of storage, store at -20°C. Avoid repeat freeze-thaw cycles  
Applications: IHC, ICC/IF, WB  
Package:

Description	Catalog No.	Size
GSTP1 Concentrated	MC0976	1 ml

**IHC Procedure\*:**

Positive Control Tissue: Breast cancer  
Concentrated Dilution: 50-100  
Pretreatment: Citrate pH6.0 or EDTA pH8.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C  
Incubation Time and Temp: 30-60 minutes @ RT  
Detection: Refer to the detection system manual

\* Result should be confirmed by an established diagnostic procedure.