

Mouse Anti-GSTP1 [3F2C2]: MC0647, MC0647RTU7

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 (α , κ , μ , π , σ , θ , ζ , and ω) are identified, while only GST- α , - μ , and - π are described in the central nervous system. GSTP1 (GST π) 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- κ 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:

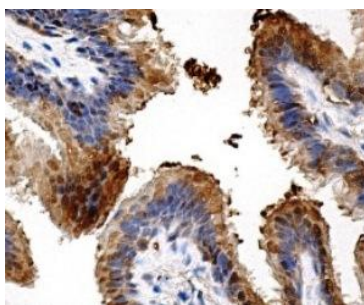
Clone:	3F2C2
Source:	Mouse
Isotype:	IgG1k
Reactivity:	Human
Immunogen:	Purified truncated recombinant human GSTP1 protein
Localization:	Nucleus, cytoplasm
Formulation:	Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN ₃)
Storage:	Store at 2°- 8°C
Applications:	IHC, ICC/IF, IP, WB
Package:	

Description	Catalog No.	Size
GSTP1 [3F2C2] Concentrated	MC0647	1 ml
GSTP1 [3F2C2] Prediluted	MC0647RTU7	7 ml

IHC Procedure*:

Positive Control Tissue:	Breast cancer
Concentrated Dilution:	25-200
Pretreatment:	Tris EDTA pH9.0, 15 minutes Pressure Cooker or 30-60 minutes 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.



FFPE human bronchus stained with anti-GSTP1 showing cytoplasmic & nuclear staining of respiratory epithelial cells

References:

1. A systematic approach to analysing gene-gene interactions: polymorphisms at the microsomal epoxide hydrolase EPHX and glutathione S-transferase GSTM1, GSTT1, and GSTP1 loci and breast cancer risk. Spurdle, AB., et al. Cancer Epidemiol Biomarkers Prev. 16: 769-74, 2007.
2. Regulation of glutathione S-transferase P1-1 gene expression by NF-kappaB in tumor necrosis factor alpha-treated K562 leukemia cells. Morceau, F., et al. Biochem Pharmacol. 67: 1227-38, 2004.