

Rabbit Anti-GSTP1 [MD116R]: RM0465, RM0465RTU7

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: MD116R
 Source: Rabbit
 Isotype: IgG
 Reactivity: Human
 Immunogen: Recombinant full length protein of human GSTP1 aa 1 to the C-terminus
 Localization: Nucleus, cytoplasm
 Formulation: Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN₃).
 Storage: Store at 2°- 8°C
 Applications: IHC, Flow Cyt., ICC/IF, WB
 Package:

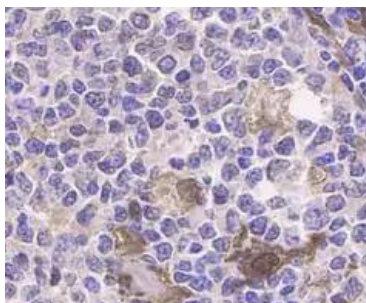
| Description | Catalog No. | Size |
|--------------------|-------------|------|
| GSTP1 Concentrated | RM0465 | 1 ml |
| GSTP1 Prediluted | RM0465RTU7 | 7 ml |

IHC Procedure*:

Positive Control Tissue: Breast cancer
 Concentrated Dilution: 50-200
 Pretreatment: Tris EDTA pH9.0, 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.



FFPE human tonsil stained with anti-GSTP1 using DAB

References:

1. Cytosine Methylation Represses Glutathione S-Transferase P1 (GSTP1) Gene Expression in Human Prostate Cancer Cells. Rakesh Singal, et al. Cancer Research 2001.
2. Immunohistochemical detection of P-glycoprotein and GSTP1-1 in testis cancer. A. Katagiri, et al. Br J Cancer. Jul; 68(1): 125-129, 1992.
3. Immunohistochemical Localization of Glutathione S-Transferases in Human Lung. Sisko Anttila, et al. Cancer Research. 53, 5643-564.. December 1, 1993.