

Novocastra™ Lyophilized Mouse Monoclonal Antibody Glutathione S-Transferase mu

Product Code: NCL-GSTmu-437

Intended Use	FOR RESEARCH USE ONLY.
Specificity	Human glutathione S-transferase mu.
Clone	10H6
Ig Class	IgM
Antigen Used for Immunizations	Recombinant prokaryotic fusion protein corresponding to the human GST mu-4 isoform.
Hybridoma Partner	Mouse myeloma (p3-NS1-Ag4-1).
Preparation	Lyophilized tissue culture supernatant containing 15 mM sodium azide. Reconstitute with the volume of sterile distilled water indicated on the vial label.
Effective on Frozen Tissue	No
Effective on Paraffin Wax Embedded Tissue	Yes
Recommendations on Use	Immunohistochemistry: Typical working dilution 1:40–1:80. 60 minutes primary antibody incubation at 25 °C. Standard ABC technique. Western Blotting: Not recommended.
Positive Controls	Immunohistochemistry: Testis.
Staining Pattern	Cytoplasmic with nuclear staining also occasionally observed.
Storage and Stability	Store unopened lyophilized antibody at 4 °C. Under these conditions, there is no significant loss in product performance up to the expiry date indicated on the vial label. The reconstituted antibody is stable for at least two months when stored at 4 °C. For long term storage, it is recommended that aliquots of the antibody are frozen at -20 °C (frost-free freezers are not recommended). Repeated freezing and thawing must be avoided. Prepare working dilutions on the day of use.
General Overview	The glutathione S-transferases (GSTs) are a multigene family of isoenzymes which catalyse the conjugation of glutathione to electrophilic substrates. These enzymes are involved in the detoxification of both endogenous and exogenous electrophiles which can react with cellular components such as DNA. The modification of DNA by reactive compounds can initiate carcinogenesis and the GSTs are believed to play a role in neutralising carcinogens. The cytosolic GST isoenzymes have been classified into four evolutionary classes; alpha, mu, pi and theta. These isoenzymes may be singly or multi-expressed in a variety of normal tissues, including stomach, bowel, brain, heart, liver, pancreas, breast, kidney and skin at differing levels.
General References	Den Boer M L, Pieters R, Kazemier K M, et al.. <i>British Journal of Haematology</i> . 104 (2): 321–327 (1999). Hansson L O, Bolton-Grob R, Massoud T, et al.. <i>Journal of Molecular Biology</i> . 287: 265–276 (1999). Alpert L C, Schechter R L, Berry D A, et al.. <i>Clinical Cancer Research</i> . 3 (5): 661–667 (1997). Matsumoto T, Hayase R, Kodama J, et al.. <i>European Journal of Obstetrics, Gynaecology and Reproductive Biology</i> . 73 (2): 171–176 (1997). Bongers V, Snow G B, de Vries N, et al.. <i>Laboratory Investigations</i> . 73 (4): 503–510 (1995). Hall A G, Autzen P, Catten A R, et al.. <i>Cancer Research</i> . 54 (20): 5251–5254 (1994). Klys H S, Whillis D, Howard G, et al.. <i>British Journal of Cancer</i> . 66 (3): 589–593 (1992). Campbell E, Takahashi Y, Abramovitz M, et al.. <i>Journal of Biological Chemistry</i> . 265 (16): 9188–9193 (1990). Peters W H M, Kock L, Nagengast F M, et al.. <i>Biochemical Pharmacology</i> . 39 (3): 591–597 (1990).

