Novocastra™ Lyophilized Mouse Monoclonal Antibody Glutathione S-Transferase alpha

Product Code: NCL-GSTal-436

Intended Use	FOR RESEARCH USE ONLY.
Specificity	Human glutathione S-transferase alpha.
Clone	38H11
Ig Class	IgG1
Antigen Used for Immunizations	Prokaryotic recombinant fusion protein corresponding to a 160 amino acid portion of the 220 amino acid liver isoforms of the GSTalpha molecule.
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	Not evaluated.
Effective on Paraffin Wax Embedded Tissue	Yes
Recommendations on Use	Immunohistochemistry: Typical working dilution 1:50–1:100. 60 minutes primary antibody incubation at 25 °C. Standard ABC technique. Western Blotting: Not evaluated.
Positive Controls	Immunohistochemistry: Liver or kidney. Western Blotting: Not evaluated.
Staining Pattern	Nuclear and cytoplasmic.
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 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	Tiltman A J and Haffajee Z. Gynecol. Obstet. Invest. 47 (4): 247–250 (1999). Schipper D I, Wagenmans M J, Peters W H, et al.. Anticancer Research. 16 (6B): 3721–3724 (1996). Segers K, Kumar-Singh S, Weyler J, et al.. Journal of Cancer Research and Clinical Oncology. 122 (10): 619–624 (1996). Murray G I, Taylor V E, McKay J A, et al.. Journal of Pathology. 177: 147–152 (1995). Mehta R, Davis H G, Laver G W, et al.. Cancer Letters. 84: 163–172 (1994). Anttila S, Hirvonen A, Vainio H, et al.. Cancer Research. 53: 5643–5648 (1993). Suzuki T, Johnston P N and Board P G. Genomics. 18: 680–686 (1993). Cairns J, Wright C, Cattan A R, et al.. Journal of Pathology. 166: 19–25 (1992). Klys H S, Whillis D, Howard G, et al.. British Journal of Cancer. 66 (3): 589–593 (1992).

Leica Biosystems Newcastle Ltd
Balliol Business Park West
Benton Lane
Newcastle Upon Tyne NE12 8EW
United Kingdom
✆ +44 191 215 4242