

Novocastra™ Lyophilized Mouse Monoclonal Antibody Glutathione S-Transferase pi

Product Code: NCL-GSTpi-438

Intended Use	FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES.
Specificity	Human glutathione S-transferase pi.
Clone	LW29
lg Class	lgG2a
Antigen Used for Immunizations	Prokaryotic recombinant fusion protein corresponding to the majority of the glutathione s-transferase pi molecule.
Hybridoma Partner	Mouse myeloma (p3-NS1-Ag4-1).
Preparation	Lyophilized tissue culture supernatant containing 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 on paraffin sections. Heat Induced Epitope Retrieval (HIER): Please follow the instructions for use in Novocastra Epitope Retrieval Solution pH 6. Suggested dilution: 1:400 for 30 minutes at 25 °C. This is provided as a guide and users should determine their own optimal working dilutions. Visualization: Please follow the instructions for use in the Novolink™ Polymer Detection Systems. For further product information or support, contact your local distributor or regional office of Leica Biosystems, or alternatively, visit the Leica Biosystems Web site, www.LeicaBiosystems.com <u>The performance of this antibody should be validated when utilized with other manual staining</u> systems or automated platforms.
Positive Controls	Immunohistochemistry: Liver.
Staining Pattern	Nuclear and cytoplasmic.
Storage and Stability	Store unopened lyophilized antibody at 2-8 °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 2-8 °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.
Warnings and Precautions	This reagent has been prepared from the supernatant of cell culture. As it is a biological product, reasonable care should be taken when handling it. This reagent contains sodium azide. A Material Safety Data Sheet is available upon request or available from www.leicaBiosystems.com





BIOSYSTEMS

General Overview	The glutathione S-transferases (GSTs) are a multigene family of iscenzymes 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	 Rodilla V, Benzie A A, Veitch J M, et al Xenobiotica. 28 (5): 443–456 (1998). Ali-Osman F, Akande O, Antoun G, et al The Journal of Biological Chemistry. 272 (15): 10004–10012 (1997). Ali-Osman F, Brunner J M, Kutluk T M, et al Clinical Cancer Research. 3 (12 Pt 1): 2253–2261 (1997). Miura K, Suzuki S, Tanita J, et al Japanese Journal of Cancer Research. 88 (2): 143–151 (1997). Moral A, Palou J, Lafuente A, et al British Journal of Dermatology. 136 (3): 345–350 (1997). Inoue T, Ishida T, Sugio K, et al Respiration. 62 (4): 223–227 (1995). Collier J D, Bennet M K, Hall A, et al Gut. 35 (2): 266–269 (1994). Ranganathan S and Tew K D. Carcinogenesis. 12 (12): 2383–2387 (1991).