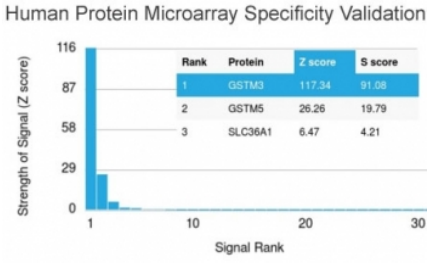
GSTM3 Antibody / Glutathione S-Transferase Mu 3 Antibody [clone CPTC-GSTMu3-1] (V7281)

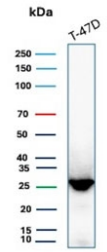
Catalog No.	Formulation	Size
V7281-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7281-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7281SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V7281IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

Bulk quote request

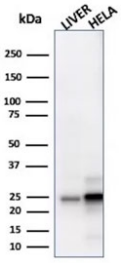
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2a, kappa
Clone Name	CPTC-GSTMu3-1
Purity	Protein G affinity chromatography
UniProt	P21266
Localization	Cytoplasmic
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT Wesern blot: 2-4ug/ml
Limitations	This GSTM3 Antibody / Glutathione S-Transferase Mu 3 Antibody is available for research use only.



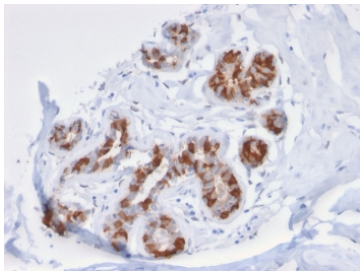
GSTM3 Antibody Protein Microarray Analysis. Protein microarray analysis of GSTM3 Antibody / Glutathione S-Transferase Mu 3 Antibody using a HuProt microarray containing more than 19,000 full-length human proteins. Z-scores represent antibody-binding signal strength in standard deviations above the mean signal across the array, while the S-score represents the difference between the highest and next-highest Z-scores and provides a measure of relative target specificity. This analysis evaluates the binding profile of clone CPTC-GSTMu3-1 across the human proteome.



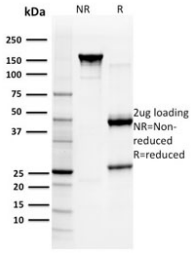
GSTM3 Antibody in Human T-47D Breast Cancer Cells WB. Western blot testing of GSTM3 Antibody / Glutathione S-Transferase Mu 3 Antibody in human T-47D breast cancer cell lysate. A prominent band is detected at approximately 26 kDa, consistent with the predicted molecular weight of GSTM3. This GSTM3 Antibody demonstrates detection of glutathione S-transferase Mu 3 in human breast cancer cells.



GSTM3 Antibody in Human Liver and HeLa Cells WB. Western blot testing of GSTM3 Antibody / Glutathione S-Transferase Mu 3 Antibody in human liver tissue and HeLa cervical cancer cell lysates. A prominent band is detected at approximately 26 kDa, consistent with the predicted molecular weight of GSTM3. This GSTM3 Antibody demonstrates detection of glutathione S-transferase Mu 3 in human tissue and cancer cell lysates.



GSTM3 Antibody in Human Breast Carcinoma IHC. Immunohistochemistry testing of GSTM3 Antibody / Glutathione S-Transferase Mu 3 Antibody in FFPE human breast carcinoma tissue. Heat-induced epitope retrieval was performed by boiling tissue sections in 10 mM Tris with 1 mM EDTA, pH 9, for 20 min followed by cooling prior to staining. This GSTM3 Antibody demonstrates detection of glutathione S-transferase Mu 3 in human breast tumor tissue.



GSTM3 Antibody Purity Analysis by SDS-PAGE. Electrophoretic analysis of purified, BSA-free GSTM3 Antibody / Glutathione S-Transferase Mu 3 Antibody under reducing and non-reducing conditions to evaluate antibody purity and integrity. The expected intact IgG and separated heavy- and light-chain patterns support the integrity of the purified GSTM3 Antibody preparation.

Description

GSTM3 Antibody / Glutathione S-Transferase Mu 3 Antibody recognizes GSTM3, a cytosolic enzyme belonging to the mu class of glutathione S-transferases. GSTM3 contributes to cellular detoxification by catalyzing the conjugation of reduced glutathione to electrophilic compounds. Through this activity, the enzyme helps protect cells from potentially damaging products generated by oxidative stress and exposure to environmental toxins, carcinogens and other xenobiotic compounds.

GSTM3 belongs to a cluster of closely related mu class GST enzymes encoded on chromosome 1. Members of this family participate in glutathione-dependent metabolism and cellular defense against reactive chemical compounds.

Genetic variation within the mu class GST family can influence individual responses to environmental exposures and therapeutic compounds, making these enzymes important research targets in toxicology, pharmacology and disease susceptibility.

GSTM3 has also received considerable attention in cancer research. Altered GSTM3 expression and genetic variation have been investigated in relation to susceptibility, progression and prognosis in multiple malignancies. GSTM3 has been studied particularly in renal cell carcinoma, where reduced expression has been associated with increased disease risk and poorer clinical outcomes. Its connections to detoxification, oxidative stress and cellular responses to carcinogens make GSTM3 relevant to research examining the relationship between metabolic defense mechanisms and tumor biology.

Clone CPTC-GSTMu3-1 is a mouse monoclonal antibody generated against full-length recombinant human GSTM3 and purified by Protein G affinity chromatography. NSJ Bioreagents provides this GSTM3 Antibody for research into GSTM3 biology, glutathione-dependent detoxification and cellular defense mechanisms. A Glutathione S-Transferase Mu 3 Antibody can support investigation of this enzyme and its roles in xenobiotic metabolism, oxidative stress and cancer-related biology.

Explore our Cancer Marker Antibodies page for additional reagents targeting proteins involved in tumor biology, oxidative stress and cancer-related metabolic pathways.

Application Notes

Optimal dilution of the GSTM3 Antibody / Glutathione S-Transferase Mu 3 Antibody should be determined by the researcher.

1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Full length recombinant human protein was used as the immunogen for this GSTM3 antibody.

Storage

Store the GSTM3 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

GSTM3 antibody, Glutathione S-Transferase Mu 3 antibody, GST Mu 3 antibody, GSTM3-3 antibody

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