

## GSTM3 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](#)

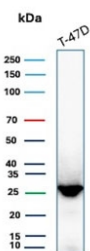
<b>Availability</b>	1-3 business days
<b>Species Reactivity</b>	Human
<b>Format</b>	Purified
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal (mouse origin)
<b>Isotype</b>	Mouse IgG2a, kappa
<b>Clone Name</b>	CPTC-GSTMu3-1
<b>Purity</b>	Protein G affinity chromatography
<b>UniProt</b>	P21266
<b>Localization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

### Human Protein Microarray Specificity Validation

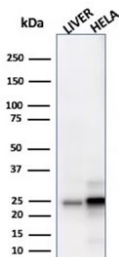


Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using GSTM3 antibody (clone CPTC-GSTMu3-1). These results demonstrate the foremost specificity of the CPTC-GSTMu3-1 mAb.

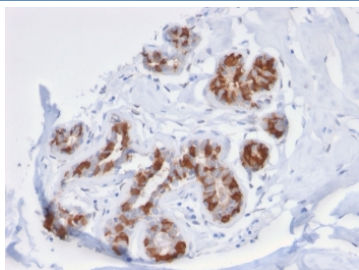
Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.



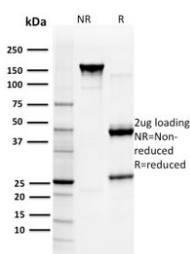
Western blot testing of human T-47D cell lysate with GSTM3 antibody. Predicted molecular weight ~26 kDa.



Western blot testing of human liver and HeLa cell lysate with GSTM3 antibody. Predicted molecular weight ~26 kDa.



IHC staining of FFPE human breast carcinoma tissue with GSTM3 antibody (clone CPTC-GSTMu3-1). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



SDS-PAGE analysis of purified, BSA-free GSTM3 antibody (clone CPTC-GSTMu3-1) as confirmation of integrity and purity.

## Description

Members of the glutathione S-transferase (GST) family of proteins function in the detoxification of xenobiotics to protect cells against toxicant-induced damage. There are eight families of GST proteins, each of which are composed of proteins that have a variety of functions throughout the cell. The GSTM proteins (GSTM1-GSTM5 in human and GSTM1-GSTM7 in mouse) are members of the mu class of enzymes that conjugate with glutathione and function in the detoxification of carcinogens, environmental toxins and products of oxidative stress. The genes encoding the mu class of enzymes are organized in a gene cluster on chromosome 1p13.3 and are known to be highly polymorphic. These genetic variations

can change an individual's susceptibility to carcinogens and toxins as well as affect the toxicity and efficacy of certain drugs. Null mutations of this class mu gene have been linked with an increase in a number of cancers, likely due to an increased susceptibility to environmental toxins and carcinogens. Multiple protein isoforms are encoded by transcript variants of this gene. GSTM3 protein is selectively expressed in the testis and brain. GSTM3 may also be tumor suppressive in RCC, as low expression has been demonstrated to correlate with RCC risk and poor prognosis in post-op patients.

## Application Notes

Optimal dilution of the GSTM3 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).