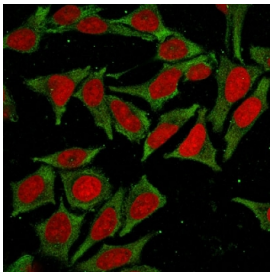
GSTM2 Antibody [clone CPTC-GSTMu2-2] (V7416)

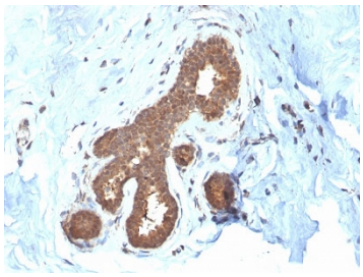
Catalog No.	Formulation	Size
V7416-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7416-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7416SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V7416IHC-7ML	Prediluted 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

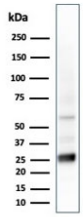
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	CPTC-GSTMu2-2
Purity	Protein G affinity chromatography
UniProt	P28161
Localization	Cytoplasmic
Applications	Flow Cytometry : 1-2ug/million cells Immunofluorescence : 1-2ug/ml Immunohistochemistry (FFPE) : 0.5-1ug/ml for 30 min at RT
Limitations	This GSTM2 antibody is available for research use only.



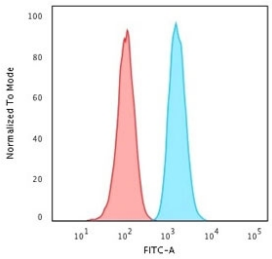
Immunofluorescent staining of fixed and permeabilized human HeLa cells with GSTM2 antibody (green) and Reddot nuclear stain (red).



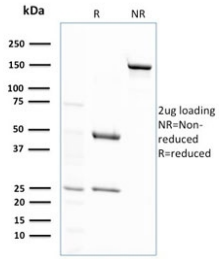
IHC staining of FFPE human placental tissue with GSTM2 antibody (clone CPTC-GSTMu2-2). HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min and allow to cool before testing.



Western blot testing of human liver lysate with GSTM2 antibody (clone CPTC-GSTMu2-2).



Flow cytometry testing of PFA-fixed human HeLa cells with GSTM2 antibody (clone CPTC-GSTMu2-2); Red=isotype control, Blue= GSTM2 antibody.



SDS-PAGE analysis of purified, BSA-free GSTM2 antibody (clone CPTC-GSTMu2-2) 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. GSTM2 is specific for muscle hence the alternate name GST muscle antibody.

Application Notes

Optimal dilution of the GSTM2 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 GSTM2 antibody.

Storage

Store the GSTM2 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).