

# Glutathione S-transferase mu 2 (muscle)

## UniProt

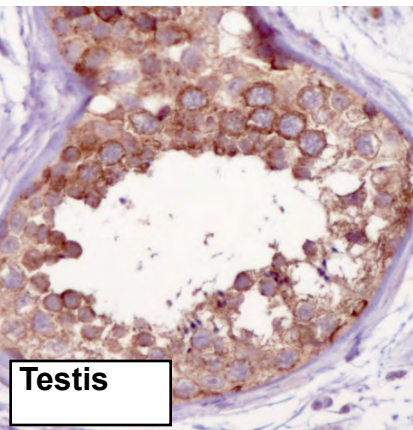
**Function:** Conjugation of reduced glutathione to a wide number of exogenous and endogenous hydrophobic electrophiles.

**Subcellular location:** Cytoplasm.

**Tissue specificity:** Muscle.

Three antibodies: GSTMu2-1, GSTMu2-2 and GSTMu2-3 were tested. GSTMu2-2 was approved for IHC and selected for full protein profiling.

## GSTMu2-2 (CAB040547)



### Immunohistochemistry

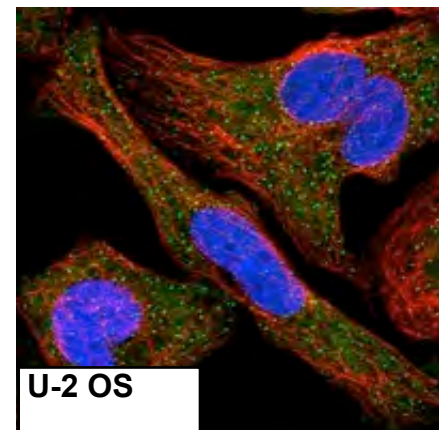
**IHC protocol:** HIER pH 6, Dilution 1:5000

**IHC test staining:** Cytoplasmic staining with high expression in testes, placenta, neuronal cells in CNS and skeletal muscle.

### IHC Annotators comments

The majority of normal tissues displayed moderate cytoplasmic positivity. Cells in seminiferous ducts and neuronal cells of CNS were strongly stained. Bile ducts, alveoli, squamous epithelia, lymphoid tissues, glial cells, bone marrow poietic cells and smooth muscle were weakly stained or negative.

Most malignancies exhibited weak to moderate cytoplasmic positivity. Malignant lymphomas, urothelial, renal, stomach, pancreatic and liver cancers were mainly negative.



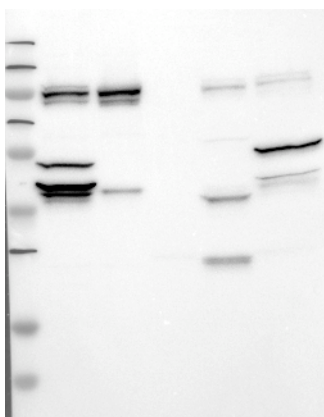
### Immunofluorescence

**IF Overlay:** antibody (green), anti-tubulin (red) and DAPI (blue)

**IF Localisation:** Staining of cytoplasm in all three cell lines.

Additional staining of nucleus in U-251 MG and A-431. Additional staining of vesicles in U-2 OS and centrosome in U-251 MG.

IF Validation: Subcellular localization supported by literature.



### Western blot

**WB Size markers (kDa):** 250, 130, 95, 72, 55, 36, 28, 17, 11

**WB Lanes:** Marker(1), RT-4(2), U251 MG(3), Plasma(4), Liver(5), Tonsil(6)

**WB Target weight (kDa):** 28, 26, 23, 21

**WB Validation:** Not supportive (Weak band of predicted size but with additional bands of higher intensity also present)