**BACKGROUND**

The glycolal pathway plays a role in the detoxification of glucose degradation products (GDP). Glyoxalase I (GLO1), a member of the glyoxalase family, is effective in eliminating GDP. Overexpression or silencing of Glyoxalase I in mouse brain suggests an association between Glyoxalase I and anxiety. Glyoxalase I has three isoforms generated from two alleles in the genome which forms two homodimers and one heterodimer, each subunit binding one zinc ion. Research demonstrates that GLO1 gene expression is induced in colon carcinoma. Both an Insulin response element (IRE) and a zinc metal response element (MRE) in the promoter region of the GLO1 gene have been identified.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: GLO1 (human) mapping to 6p21.2; Gl01 (mouse) mapping to 17 A3.3.

**SOURCE**

Glyoxalase I (D-6) is a mouse monoclonal antibody raised against amino acids 1-184 representing full length Glyoxalase I of human origin.

**PRODUCT**

Each vial contains 200 µg IgG2k kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**APPLICATIONS**

Glyoxalase I (D-6) is recommended for detection of Glyoxalase I of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation (1-2 µg per 100-500 µg of total protein [1 ml of cell lysate]), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).


Molecular Weight of Glyoxalase I monomer: 24 kDa.

Positive Controls: Glyoxalase I (h2): 293 T Lysate: sc-112198, NIH/3T3 whole cell lysate: sc-2210 or KNRK whole cell lysate: sc-2214.

**STORAGE**

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**DATA**

![Western blot analysis of Glyoxalase I expression in non-transfected 293T.](image)

Glyoxalase I (D-6): sc-133144. Western blot analysis of Glyoxalase I expression in non-transfected 293T.

5. Xie, Z., et al. 2019. MMSET I acts as an oncoprotein and regulates GLO1 expression in t(4;14) multiple myeloma cells. Leukemia 33: 739-748.

**SELECT PRODUCT CITATIONS**

5. Xie, Z., et al. 2019. MMSET I acts as an oncoprotein and regulates GLO1 expression in t(4;14) multiple myeloma cells. Leukemia 33: 739-748.

**RESEARCH USE**

For research use only, not for use in diagnostic procedures.