

## 32-6762: GLO1 Human, Active

**Application :** Functional Assay

**Alternative Name :** GLYI, GLOD1, GLO1, Glyoxalase-1, Lactoylglutathione lyase, Methylglyoxalase, Aldoketomutase, Ketone-aldehyde mutase, Glyoxalase I, S-D-lactoylglutathione methylglyoxal lyase, Glx I.

### Description

Source: Escherichia Coli.

Sterile filtered colorless solution.

GLO1 is involved in the catalysis and formation of S-lactoyl-glutathione from methylglyoxal condensation and reduced glutathione. GLO1 is linked to HLA and is localized to 6p21.3-p21.1, between HLA and the centromere. GLO1 enzyme is abundantly expressed and present in numerous tumor cell lines, in which its concentration is often upregulated ubiquitously. GLO1 is a major susceptible gene for autism in an ethnic Chinese population from Taiwan. GLO1 might be involved in the pathophysiology of mood disorders. GLO1 plays a role in the pathophysiology of mood disorders. Overexpression of GLO1 is associated with kidney tumor.

Glyoxalase-I Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 184 amino acids and having a molecular mass of 20.7 kDa. Glyoxalase-1 is purified by proprietary chromatographic techniques.

### Product Info

**Amount :** 2 µg / 10 µg

**Purification :** Greater than 90.0% as determined by SDS-PAGE.

**Content :** Glyoxalase-1 solution containing 20mM Tris-HCl pH-8, 1mM DTT and 10% glycerol.

**Storage condition :** Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

**Amino Acid :** MAEPQPPSGG LTDEAALSCC SDADPSTKDF LLQQTMLRVK DPKKSLDFYT RVLGMTLIQK CDFPIMKFSL YFLAYEDKND IPKEKDEKIAWALSRKATLE LTHNWGTEDD ETQSYHNGNS DPRGFGHIGI AVPDVYSACK RFEELGVKFV KKPDDGKMKG LAFIQDPDGY WIEILNPNKM ATLM.

### Application Note

Specific activity: > 400 units/mg. One unit will form 1.0µmol of S-lactoylglutathione from methylglyoxal and reduced glutathione per minute at pH6.5 at 25C