

**Catalog No. LF-MA0024**

**MONOCLONAL ANTIBODY**



## Anti-Glutathione Reductase (2B3)

**Background :** Glutathione reductase (GR) is a member of pyridine nucleotide-disulfide oxidoreductases, which includes the closely related enzymes thioredoxin reductase, lipoamide dehydrogenase, trypanothione reductase and mercuric ion reductase. GR is a cytoplasmic flavoenzyme widely distributed in aerobic organisms. The dimeric protein is composed of two identical subunits, each containing 1 FAD and 1 redox-active disulfide/dithiol as components of the catalytic apparatus. It plays a role in maintaining glutathione (GSH) in its reduced form by catalyzing the reduction of glutathione disulfide (GSSG) (1):



In most eukaryotic cells, GR maintains the ratio of [GSH]/[GSSG] elevated, and participates in several vital functions such as the detoxification of reactive oxygen species as well as protein and DNA biosynthesis (2).

**Immunogen :** Recombinant human protein purified from *E.coli*

**Host :** Mouse

**Clone number :** 2B3

**Isotype :** IgG1, k

**Size :** 100ul

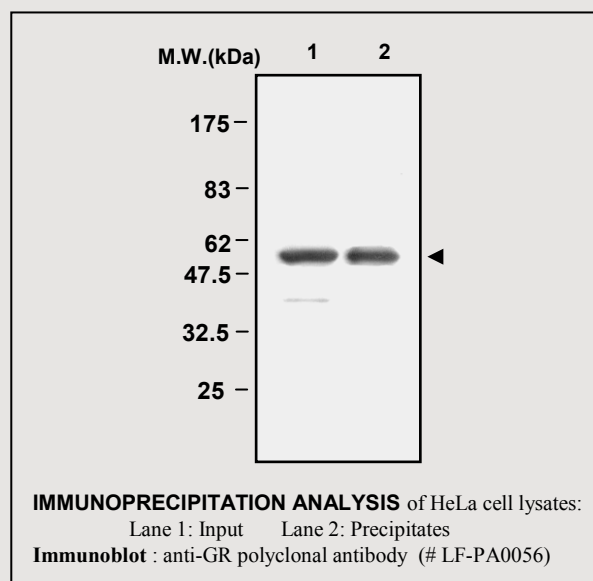
**Compostion :** PBS containing 50% glycerol

**Positive control :** HeLa cell lysates

**Storage :** Store for 1 year at -20°C from date of shipment

### Species cross reactivity

Human	Mouse	Rat
+	-	-



### Applications :

ELISA

Immunoprecipitation (1-2u1/400ul lysates)

### Background Reference :

- 1) Carlberg, I. and Mannervik, B. (1985) J. Biol. Chem. 261: 1629-1635.
- 2) Picaud, T. and Desbois, A. (2002) J. Biol. Chem. 277: 31715-31721.

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