

Catalog No. LF-MA0206

MONOCLONAL ANTIBODY



Anti- Glutathione Peroxidase 1 (13B2AF)

Background : Glutathione peroxidases (Gpxs) are ubiquitously expressed proteins which catalyze the reduction of hydrogen peroxides and organic hydroperoxides by glutathione. There are several isoforms which differ in their primary structure and localization. The classical cytosolic/mitochondrial GPx1 (cGPx) is a selenium-dependent enzyme, first of the GPx family to be discovered. GPx2, also known as gastrointestinal GPx (GI-GPx), is an intracellular enzyme expressed only at the epithelium of the gastrointestinal tract (1). Extracellular plasma GPx (pGPx or GPx3) is mainly expressed by the kidney from where it is released into the blood circulation (2). Phospholipid hydroperoxide GPx4 (PH-GPx) expressed in most tissues, can reduce many hydroperoxides including hydroperoxides integrated in membranes, hydroperoxy lipids in low density lipoprotein orthymine (3). All mammalian GPx family members, except for the recently described Cys containing GPx3 and epididymis-specific secretory GPx (eGPx or GPx5) isoforms, possess selenocysteine at the active site (4-5).

Immunogen : Recombinant mouse protein purified from E.coli (Gpx1)

Host : Mouse

Clone number : 13B2AF

Isotype : IgG1, k

Size : 100 μ l

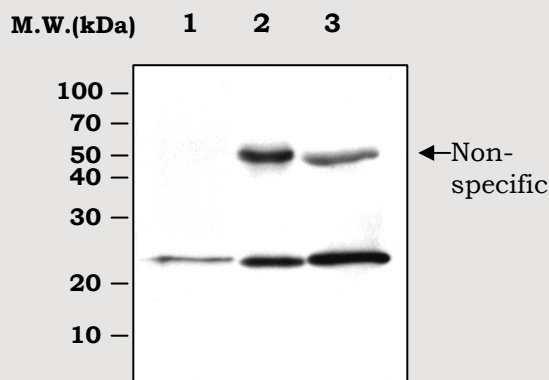
Compositon : Hepes with 0.15M NaCl, 0.01% BSA, 0.03% sodium azide, and 50% glycerol

Positive control : Mouse Liver lysate

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

Species cross reactivity

Human +	Mouse +	Rat +
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Immunoblot Analysis of cell lysates

Lane 1 : HL-60 cell lysate

Lane 2 : Mouse Liver tissue lysate

Lane 3 : Rat Liver tissue lysate

Applications :

ELISA

Western blotting (1: 5,000)

Immunoprecipitation (1 μ l/400 μ l cell lysates)

Background Reference :

1) Takebe, G., et al. (2002) J. Biol. Chem. 277:41254-41258.

2) Avissar, N. et al. (1994) Am. J. Physiol. 267:E68-76.

3) Bao, Y. et al. (1997) FEBS Lett. 410:210-212.

4) Chambers, I. et al. (1986) EMBO J. 5:1221-1227.

5) Perry, A. et al. (1992) Biochem. J. 285:863-870.

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