MONOCLONAL ANTIBODY



Anti-Glutathione Peroxidase 1(2A10)

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 seleniumdependent enzyme, first of the GPx family to discovered. GPx2, also known as gastrointestinal GPx (GI-GPx), is 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 lipoprotein or thymine (3). All mammalian GPx family members, except for the recently described Cys containing GPx3 epididymis-specific secretory GPx (eGPx or GPx5) isoforms, possess selenocysteine at the active site (4-5). **Immunogen:** Recombinant human protein

purified from *E.coli*

Host: Mouse

Clone number: 2A10

Isotype: IgG1, k

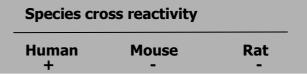
Size: 100ul

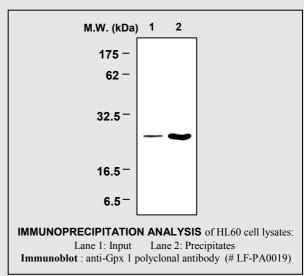
Composition : PBS containing 50% glycerol

Positive control: HL60 cell lysate

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

date of shipment





Applications:

Immunoprecipitation (1ul/400ul 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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