Catalog No. LF-MA0145

MONOCLONAL ANTIBODY

Anti-Glutathione Peroxidase 3 (55A)

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 or thymine (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 human protein purified from *E.coli*

Host : Mouse

Clone number : 55A

Isotype : IgG2b, κ

Size : 100 µℓ

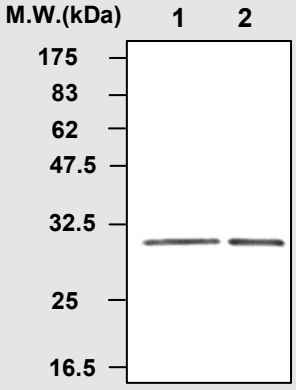
Composition: PBS containing 50% glycerol

Positive control : Bosc23 cell lysate transfected with Myc-His-Gpx3

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

Species cross reactivity

Human	Mouse	Rat
+	NT	NT



IMMUNOPRECIPITATION ANALYSIS of Bosc23 cell lysates transfected with Myc-His-Gpx3
Lane 1 : Input Lane 2 : Immunoprecipitates
Immunoblot: anti-Gpx3 polyclonal antibody [LabFrontier]

Applications :
ELISA
Immunoprecipitation (1 µℓ for 400 µℓ lysate)

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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