Catalog No. LF-MA0214

MONOCLONAL ANTIBODY

Anti-Prx1(3G5)

Background : Peroxiredoxin (Prx) is a growing peroxidase family, whose mammalian members have been known to connect with cell proliferation, differentiation, and apoptosis. Many isoforms (about 50 proteins), collected in accordance to the amino acid sequence homology, particularly amino-terminal region containing active site cysteine residue, and the thiol-specific antioxidant activity, distribute throughout all the kingdoms. Among them, mammalian Prx consists of 6 different members grouped into typical 2-Cys, atypical 2-Cys Prx, and 1-Cys Prx. Except Prx VI belonging to 1- Cys Prx subgroup, the other five 2-Cys Prx isotypes have the thioredoxindependent peroxidase (TPx) activity utilizing thioredoxin, thioredoxin reductase, and NADPH as a reducing system. Mammalian Prxs are 20 – 30 kilodalton in molecular size and vary in subcellular localization: Prx I, II, and VI in cytosol, Prx III in mitochondria, Prx IV in ER and secretion, Prx V showing complicated distribution including peroxisome, mitochondria and cytosol.

Immunogen : Recombinant mouse protein purified from *E.coli* (Prx1)

Host : Mouse

Clone number : 3G5

Isotype : IgG1, k

Size : 100ul

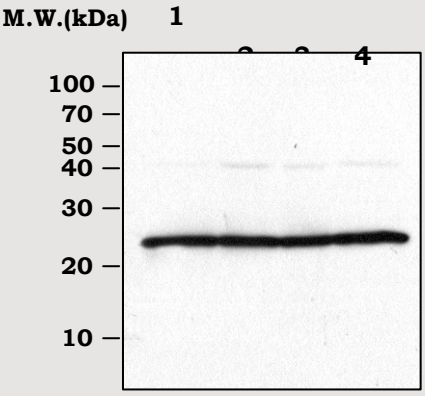
Composition : Hepes with 0.15M NaCl, 0.01% BSA, 0.03% sodium azide, and 50% glycerol

Positive control : HeLa cell lysate

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

Species cross reactivity

Human	Mouse	Rat
+	-	-



Immunoblot Analysis of cell lysates
Lane 1 : HeLa cell lysate
Lane 2 : A431 cell lysate
Lane 3 : HL-60 cell lysate
Lane 4 : SK-N-MC cell lysate

Applications :
ELISA
Western Blotting (1:20,000)
Immunoprecipitation (3u1/400ul lysates)

Background Reference :

1) Choi M.H. et al., 2005, Nature Letters. 435:347-353
2) Tolle A. et al., 2005, Free Radic Biol Med. 38:1401-1408
3) Wood Z.A. et al., 2003, Trends Biochem Sci. 28:32-40
4) Rhee S.G. et al., 2001, IUBMB Life. 52:35-41

Gentaur Molecular Products
Voortstraat 49
1910 Kampenhout, Belgium
http://www.gentaur-worldwide.com