

**LF-P0022****Methionine Sulfoxide Reductase A, Human****Product Name**

Methionine Sulfoxide Reductase A, Human

**Pack Size**

0.1mg

**Concentration**

1mg/ml

**Background**

Methionine sulfoxide reductase (MsrA) reduces methionine sulfoxide (MetO) residues in proteins and free MetO in Methionine (Met). The catalytic activity of MsrA is dependent of bound metal and cofactors, but it also requires reducing equivalents from either DTT or a thioredoxin-regenerating system. MsrA has a major impact on protecting cells against damage from oxidative. The substrates of MsrA include calmodulin, HIV protease and  $\alpha$ 1-proteinase-inhibitor. There is a connection between MsrA and Alzheimer's disease in mammals.

**Database Link**SwissProt : [Q9UJ68](#)**Reference**

- 1) Sun, H. et al. (1999) Biochemistry. 38, 105-112.
- 2) Davis, D. A. et al. (2000) Biochem. J. 346, 305-311.
- 3) Abrams, W. R. et al. (1981) Proc. Natl. Acad. Sci. U. S. A. 78, 7483-7486.
- 4) Gabbita, S. P. et al. (1999) J. Neurochem. 73, 1660-1666.
- 5) Moskovitz, J. et al. (1996) Proc. Natl. Acad. Sci. U. S. A. 93, 2095-2099.

**Composition**

Liquid in 20mM HEPES, pH 7.0, 10% Glycerol

**Storage**

Store at -80°C. Avoid frequent freeze and thaw.

**Source**

Purified from E.coli expressing the human Methionine Sulfoxide Reductase A (1-235aa without mitochondrial leader sequence)

**Molecular Weight**

28 kDa

**Form**

Liquid

**Purity**

&gt; 95% by SDS-PAGE

**Image**