RANDOX BIOSCIENCES
Discovery | Drug Development | Diagnostics

Glutathione S-transferase omega 1 (GSTO1 140 D) **Human, Recombinant, *E. coli***

Cat. No.: RCP9193 **Size:** 10µg

Synonym: GSTTLp28; P28, glutathione S-transferase omega 1-1; glutathione transferase omega; glutathione transferase omega 1; glutathione-S-transferase like, Monomethyl Arsenous Reductase.

Description: GSTO1 is a member of the theta class glutathione S-transferase-like (GSTTL) protein family. GSTO1 is expressed in a wide range of human tissues and exhibits glutathione-dependent thiol transferase and dehydroascorbate reductase activities and also catalyzes the reduction of monomethylarsonate, an intermediate in the pathway of arsenic biotransformation. GSTO1 protects from oxidative stress, a risk factor for Alzheimer disease, vascular dementia and stroke. Several polymorphisms in the coding regions of the human GSTO1 have been identified. A polymorphism causing an alanine-to-aspartate (A140D) substitution in amino acid 140 produces a variant with lowered enzyme activities in the arsenic biotransformation.

RANDOX recombinant GSTO1 140D comprises a 241 amino acid fragment (1-241) corresponding to the GSTO1 140D mutant mature protein, which is expressed in *E. coli* with an amino-terminal hexahistidine tag. This product is for research use only and is not intended for diagnostic or therapeutic use.

Form: Liquid.
Supplied in 1x Laemmli Buffer (25mM Tris-HCl pH6.8, 50mM DTT, 1% (w/v) SDS, 0.1% (w/v) Bromophenol Blue, 2.5% Glycerol).

Purity: Single band on Western blot.

References:
Withbread, A. K. *et al., Methods in Enzymology 2005;* **401**: 78-99

Kölsch, H. *et al*., *Neurology 2004;* **63** : 2255-2260.

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