

IDH1-R100A (His)

CATALOG NO.: IDH-11-326

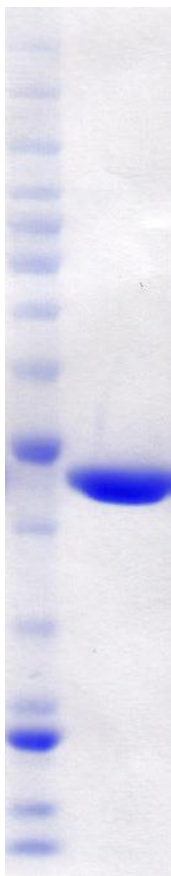
LOT NO.:

DESCRIPTION: Mutant human recombinant IDH1 with alanine (A) substituted for arginine (R100) (otherwise contains wild-type residues 2-414; Genbank Accession # NM_005896.3; MW = 47.7 kDa) expressed with a C-terminal His-tag in *E. coli*.

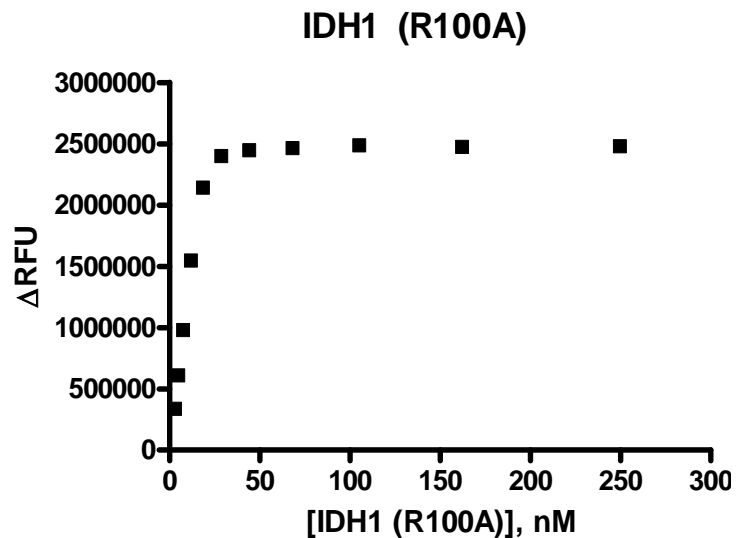
PURITY: >95% by SDS-PAGE

SUPPLIED AS: ___ $\mu\text{g}/\mu\text{L}$ in 50 mM Tris HCl, pH 7.5, 500 mM NaCl, 1 mM TCEP, 10% glycerol as determined by OD₂₈₀.

STORAGE: -70°C. Thaw quickly and store on ice before use. The remaining, unused, undiluted protein should be snap frozen, for example in a dry ice ethanol bath or liquid nitrogen. Minimize freeze/thaws if possible, but very low volume aliquots (<5 μl) or storage of diluted enzyme is not recommended.



Coomassie blue-stained SDS-PAGE (12% acrylamide) of 4 μg of RBC IDH1-R100A (His). MW markers (left) are, from top, 220, 160, 120, 100, 90, 80, 70, 60, 50, 40, 30, 25, 20, 15, 10 kDa.



IDH1 R100A Activity Assay. NADPH-dependent reduction of α -ketoglutarate was determined by quantification of remaining NADPH using diaphorase/resazurin detection. The 30 μL reaction contained 15 μM NADPH, 10 mM α -KG and a variable amount of IDH1-R100A. After incubation at room temperature for 60 minutes, the reaction was quenched by the addition of diaphorase and resazurin (15 $\mu\text{g}/\text{ml}$ and 30 μM respectively). The resulting fluorescence (ex. 535nm/em. 590nm) was measured using an Envision Reader (Perkin Elmer). An increase in ΔRFU represents oxidation of NADPH.

This product is NOT intended for therapeutic or diagnostic use in animals or in humans.