

## Product datasheet for AR51644PU-N

# OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## gldA (1-367, His-tag) Escherichia coli Protein

#### **Product data:**

**Product Type:** Recombinant Proteins

**Description:** gldA (1-367, His-tag) recombinant protein, 0.5 mg

**Species:** Escherichia coli

**Expression Host:** E. coli

**Expression cDNA Clone** MGSSHHHHHH SSGLVPRGSH MGSMDRIIQS PGKYIQGADV INRLGEYLKP LAERWLVVGD

or AA Sequence: KFVLGFAQST VEKSFKDAGL VVEIAPFGGE CSQNEIDRLR GIAETAQCGA ILGIGGGKTL

DTAKALAHFM GVPVAIAPTI ASTDAPCSAL SVIYTDEGEF DRYLLLPNNP NMVIVDTKIV AGAPARLLAA

GIGDALATWF EARACSRSGA TTMAGGKCTQ AALALAELCY NTLLEEGEKA MLAAEQHVVT PALERVIEAN TYLSGVGFES GGLAAAHAVH NGLTAIPDAH HYYHGEKVAF GTLTQLVLEN APVEEIETVA ALSHAVGLPI TLAQLDIKED VPAKMRIVAE AACAEGETIH NMPGGATPDQ

VYAALLVADQ YGQRFLQEWE

Tag: His-tag

Predicted MW:

**Concentration:** lot specific

Purity: >95% by SDS - PAGE

**Buffer:** Presentation State: Purified

41.1 kDa

State: Liquid purified protein

Buffer System: Phosphate buffered saline (pH 7.4), 10% glycerol

**Preparation:** Liquid purified protein

**Protein Description:** Recombinant E. coli gldA protein, fused to His-tag at N-terminus, was expressed in E.coli and

purified by using conventional chromatography techniques.

Storage: Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer. Avoid

repeated freezing and thawing.

**Stability:** Shelf life: one year from despatch.

**Synonyms:** Glycerol dehydrogenase, ECK3937, JW5556

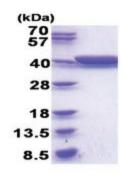




### **Summary:**

gldA catalyzes the NAD-dependent oxidation of glycerol to dihydroxyacetone (glycerone). This protein allows microorganisms to utilize glycerol as a source of carbon under anaerobic conditions. In E.coli, an important role of GldA is also likely to regulate the intracellular level of dihydroxyacetone by catalyzing the reverse reaction, i.e. the conversion of dihydroxyacetone into glycerol. gldA possesses a broad substrate specificity, since it is also able to oxidize 1,2-propanediol and to reduce glycolaldehyde, methylglyoxal and hydroxyacetone into ethylene glycol, lactaldehyde and 1,2-propanediol, respectively.

## **Product images:**



15% SDS-PAGE (3ug)