

# Product datasheet for AR09852PU-L

#### 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

## DHFR / DHFRP1 (1-187, His-tag) Mouse Protein

**Product data:** 

**Product Type: Recombinant Proteins** 

**Description:** DHFR / DHFRP1 (1-187, His-tag) mouse recombinant protein, 0.5 mg

Species: Mouse **Expression Host:** E. coli

**Expression cDNA Clone** 

MGSSHHHHHH SSGLVPRGSH MVRPLNCIVA VSQNMGIGKN GDLPWPPLRN EFKYFQRMTT

or AA Sequence: TSSVEGKQNL VIMGRKTWFS IPEKNRPLKD RINIVLSREL KEPPRGAHFL AKSLDDALRL IEQPELASKV

DMVWIVGGSS VYQEAMNQPG HLRLFVTRIM QEFESDTFFP EIDLGKYKLL PEYPGVLSEV

**OEEKGIKYKF EVYEKKD** 

Tag: His-tag

Predicted MW: 23.8 kDa

**Concentration:** lot specific

>95% **Purity:** 

**Buffer:** Presentation State: Purified

State: Liquid purified protein

Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 10% glycerol, 2 mM DTT, 0.1M NaCl

**Bioactivity:** Specific: > 0.2 units/mg, in which one unit will convert 1.0 umole of 7,8- dihydrofloate and

beta - NADPH to 5,6,7,8 - tetrahydrofloate and beta - NADP per min at pH 6.5 at 25°C

**Activity Assay:** 

1. Prepare a 1.55 ml assay buffer. The final concentrations are 50 mM potassium phosphate, 0.072 mM dihydrofolic acid, 0.1 mM beta-nicotinamide dinucleotide phosphate and 0.003 %

(w/v) bovine serum albumin.

2. Add 50 ul of recombinant DHFR protein in various concentrations (2 ug, 5 ug) in assay

buffer.

3. Mix by inversion and record the decrease at A340nm for 5 minutes.

**Endotoxin:** < 1 EU per 1ug of protein (determined by LAL method)

Preparation: Liquid purified protein

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

and purified by using conventional chromatography techniques.



#### DHFR / DHFRP1 (1-187, His-tag) Mouse Protein - AR09852PU-L

**Storage:** Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer.

Avoid repeated freezing and thawing.

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

**RefSeq:** NP 034179

**Locus ID:** 13361

UniProt ID: <u>P00375</u>, <u>Q544T5</u>

Cytogenetics: 13 47.64 cM

**Synonyms:** 8430436I03Rik; AA607882; AI662710; AW555094

Summary: Key enzyme in folate metabolism. Contributes to the de novo mitochondrial thymidylate

biosynthesis pathway (PubMed:25980602). Catalyzes an essential reaction for de novo glycine and purine synthesis, and for DNA precursor synthesis (PubMed:25980602). Binds its own

mRNA.[UniProtKB/Swiss-Prot Function]

## **Product images:**

