

## 32-6667: ARG1 Human, Active

**Application :** Functional Assay

**Alternative Name :** Arginase-1 liver, Arginase-1, liver, Arginase-1, liver A I, AI, ARG 1, ARG1, Arginase 1, Arginase liver, Arginase type I, Arginase1, Liver type arginase, Type I arginase.

### Description

Source: Escherichia Coli.

Sterile Filtered colorless solution.

Arginase-1 is part of the urea cycle, it catalyzes the hydrolysis of arginine to ornithine and urea. There are two isoforms of mammalian arginase which differ in their tissue location, subcellular localization, immunologic crossreactivity & physiologic role. Arginase-1 is a cytosolic enzyme and expressed primarily in the liver tissue. Inherited deficiency in this enzyme may lead to argininemia, which is an autosomal recessive disease in which hyperammonemia is detected.

ARG1 Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 330 amino acids ( 1-322aa ) and having a molecular mass of  $\hat{\text{A}}$  35.8 kDa. ARG1 is  $\hat{\text{A}}$  fused to a 8 amino acid His tag at C-terminus and  $\hat{\text{A}}$  purified by proprietary chromatographic techniques.

### Product Info

**Amount :** 2  $\mu\text{g}$  / 10  $\mu\text{g}$

**Purification :** Greater than 85.0% as determined by SDS-PAGE.

**Content :** ARG1 protein solution (0.5mg/ml) containing 20mM Tris-HCl buffer (pH8.0) containing 20% glycerol, 2mM DTT and 100mM NaCl.

**Storage condition :** Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

**Amino Acid :** MSAKSRTIGI IGAPFSKGQP RGGVEEGPTV LRKAGLLEKL KEQECDVKDY GDLPFADIPN DSPFQIVKNP RSVGKASEQL AGKVAEVKKK GRISLVGGD HSLAIGSISG HARVHPDLGV IWVDAHTDIN TPLTTTSGNL HGQPVSFLLK ELKGKIPDVP GFSWVTPCIS AKDIVYIGLR DVDPGEHYIL KTLGIKYFSM TEVDRLGIGK VMEETLSYLL GRKKRPIHLS FDVDGLDPSF TPATGTPVVG GLTYREGLYI TEEIYKTGLL SGLDIMEVNP SLGKTPEEVT RTVNTAVAIT LACFGLAREG NHKPIDYLNPKLEHHHHHH.

### Application Note

Specific activity is > 150,000 pmol/min/ $\mu\text{g}$ , and is defined as the amount of enzyme that hydrolyze 1.0 pmole of arginine to urea per minute at pH 10.5 at 37°C.