

Synonym

ARG1, Arginase-1

Source

Human Arginase 1, His Tag (AR1-H5228) is expressed from human 293 cells (HEK293). It contains AA Met 1 - Lys 322 (Accession # NP_000036).

Predicted N-terminus: Met 1

Molecular Characterization

ARG1(Met 1 - Lys 322)
NP_000036 Poly-his

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 35.8 kDa. The protein migrates as 35-38 kDa under reducing (R) condition (SDS-PAGE).

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in 50 mM Tris, 150 mM NaCl, pH7.5. Normally trehalose is added as protectant before lyophilization.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

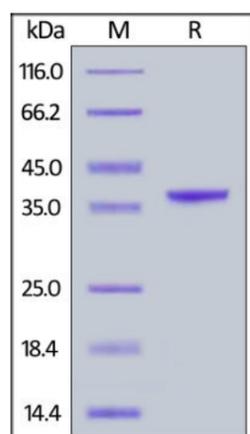
Storage

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE

Human Arginase 1, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Background

Arginase-1 (ARG1) is also known as Liver-type arginase, Type I arginase, which belongs to the arginase family. Arginase-1 / ARG1 is a manganese-containing enzyme. The reaction catalyzed by this enzyme is: arginine + H₂O → ornithine + urea. It is the final enzyme of the urea cycle. Defects in Arginase-1 / ARG1 are the cause of argininemia (ARGIN).

References

- (1) [Ikemoto M., et al., 1990, Biochem. J. 270:697-703.](#)

Human Arginase 1 / ARG1 Protein, His Tag

Catalog # AR1-H5228



(2) [Di Costanzo L., et al., 2005, Proc. Natl. Acad. Sci. U.S.A. 102:13058-13063.](#)

(3) [Di Costanzo L., et al., 2007, J. Am. Chem. Soc. 129:6388-6389.](#)

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.