Recombinant Human Arginase-1 Protein (His Tag)

Catalog Number: PDEH100715

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

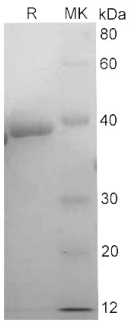
Description

Species	Human
Source	E.coli-derived Human Arginase-1 protein Met1-Lys322, with an N-terminal His
Calculated MW	36.9 kDa
Observed MW	38-40 kDa
Accession	P05089
Bio-activity	Not validated for activity

Properties

Purity	> 90% as determined by reducing SDS-PAGE.
Endotoxin	< 10 EU/mg of the protein as determined by the LAL method
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < - 20°C.
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with 5% Trehalose and 5% Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

Data



> 90 % as determined by reducing SDS-PAGE.

Background

Arginase 1, also known as liver arginase, is a binuclear manganese metalloenzyme. It is a key enzyme of the urea cycle that catalyses the conversion of L-arginine into L-ornithine and urea, the final cytosolic reaction of urea formation in the mammalian liver. Arginase 1 is abundantly expressed in liver, but it is also expressed in cells and tissues that lack a complete urea cycle, including lung. Arginase is a critical regulator of nitric oxide synthesis and vascular function. It is implicated in a variety of human diseases including vascular disease, pulmonary disease, infectious disease, immune cell function and cancer. In humans, hereditary defects in arginase result in an accumulation of arginine in the blood known as hyperarginemia. Arginase deficiency can also result in the accumulation of nitrogen in the form of ammonia, which results in hyperammonemia.