Recombinant ARGI2 protein (His tag)

Catalog Number	540127
Synonyms	Arginase II; Kidney-type arginase; Non-hepatic arginase; Type II arginase
Species	Human
Expression System	E. coli
Accession	P78540
Molecular Weight	Predictes a molecular mass of 37.74 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 38 kDa band.

Product Information

Sequence Region	23-354
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 23-354 aa (P78540) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human Arginase-2 (mitochondrial), encompassing amino acids 23-354, is a high-purity, stable fragment ideal for investigating arginine metabolism, immune regulation, and nitric oxide synthase interactions. This soluble protein unit supports structural studies and functional assays in immunological and vascular research. Arginase-2 (ARG2), encoded by the gene ARG2 in humans, is a mitochondrial enzyme (EC 3.5.3.1) that regulates extra-urea cycle arginine metabolism and modulates nitric oxide synthesis by controlling L-arginine bioavailability. It plays critical roles in immune response regulation, including suppressing activated T cell survival, modulating macrophage activation, and influencing dendritic cell function during gestation. Additionally, Arginase-2 contributes to endothelial and vascular smooth muscle cell senescence, inflammation, and apoptosis, and is implicated in sexual arousal mechanisms through its presence in genital tissues. Its mitochondrial localization underscores its involvement in cellular metabolic pathways.