

ARG82767 Glutaminase Assay Kit (Colorimetric)

Package: 96 wells

Store at: 4°C

Summary

Product Description	ARG82767 Glutaminase Assay Kit (Colorimetric) is a detection kit for the quantification of Glutaminase activity in cells, bacteria and tissue samples.
Tested Reactivity	All
Tested Application	FuncSt
Specificity	The assay is initiated with the enzymatic hydrolysis of Glutamine by Glutaminase. The enzyme catalysed reaction products can be measured at a colorimetric readout at 620 nm.
Target Name	Glutaminase
Conjugation Note	Read at 620 nm (colorimetric)
Detection Range	0.01 - 1 µmol/ml
Sample Type	Cells, bacteria and tissue samples.
Sample Volume	20 µl
Alternate Names	EC 3.5.1.2; AAD20; L-glutamine amidohydrolase; KGA; Glutaminase kidney isoform, mitochondrial; GAM; K-glutaminase; GLS; GAC; GLS1

Application Instructions

Assay Time	~ 1.5 hours
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Properties

Form	96 well
Storage instruction	Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	GLS
Gene Full Name	glutaminase
Background	This gene encodes the K-type mitochondrial glutaminase. The encoded protein is an phosphate-activated amidohydrolase that catalyzes the hydrolysis of glutamine to glutamate and ammonia. This protein is primarily expressed in the brain and kidney plays an essential role in generating energy for metabolism, synthesizing the brain neurotransmitter glutamate and maintaining acid-base balance in the kidney. Alternate splicing results in multiple transcript variants. [provided by RefSeq, Jan 2012]
Function	Catalyzes the first reaction in the primary pathway for the renal catabolism of glutamine. Plays a role in maintaining acid-base homeostasis. Regulates the levels of the neurotransmitter glutamate, the main excitatory neurotransmitter in the brain (PubMed:30575854, PubMed:30239721, PubMed:30970188).

[Isoform 2]: Lacks catalytic activity. [UniProt]

Highlight

Related products:

[Glutaminase antibodies](#); [Glutaminase ELISA Kits](#);

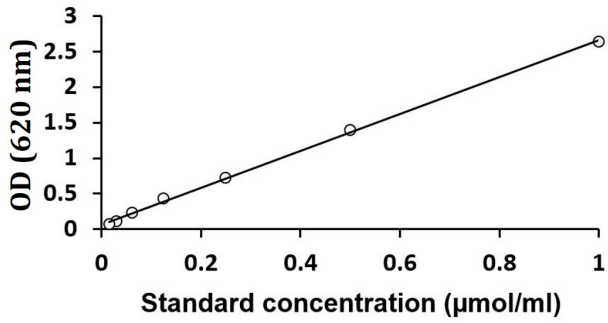
Related news:

[TCA intermediate fumarate promotes mitobiogenesis](#)

Cellular Localization

Isoform 1: Cytoplasm, cytosol. Isoform 3: Mitochondrion. [UniProt]

Images



ARG82767 Glutaminase Assay Kit (Colorimetric) typical data demonstration image

ARG82767 Glutaminase Assay Kit (Colorimetric) results of a typical standard run with optical density reading at 620 nm, using colorimetric reading.