



# Rabbit Anti-Arabidopsis thaliana GLU1 Polyclonal Antibody (CABT-Z1067R)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Immunogen</b>	KLH-conjugated synthetic peptide derived from N-terminal section of GLU1 protein in Arabidopsis thaliana AT5G04140.
<b>Isotype</b>	IgG
<b>Source/Host</b>	Rabbit
<b>Species Reactivity</b>	Arabidopsis thaliana
<b>Purification</b>	Immunogen affinity purified
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	WB Recommended dilution: WB: 1:1000-1:2000
<b>Molecular Weight</b>	Expected M.W.: 180kDa; Apparent M.W.: 170 kDa
<b>Reconstitution</b>	Reconstitution with 150 µl of sterile water.
<b>Cellular Localization</b>	MitochondriaChloroplast
<b>Format</b>	Lyophilized
<b>Size</b>	150 µg
<b>Preservative</b>	None
<b>Storage</b>	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 °C as supplied. 6 months, -20 to -70 °C under sterile conditions after

reconstitution. 1 month, 2 to 8 °C under sterile conditions after reconstitution.

Ship

Wet ice

## BACKGROUND

### Introduction

Ferredoxin-dependent glutamate synthase 1 (also known as Glutamine oxoglutarate aminotransferase) is an enzyme and frequently abbreviated as GOGAT. This enzyme manufactures glutamate from glutamine and  $\alpha$ -ketoglutarate, and thus along with glutamine synthetase (abbreviated GS) plays a central role in the regulation of nitrogen assimilation in photosynthetic eukaryotes and prokaryotes. This is of great importance as primary productivity in many marine environments is regulated by the availability of inorganic nitrogen. GOGAT has two forms in plants: ferredoxin-dependent GOGAT (Fd-GOGAT) and NADH-dependent GOGAT (NADH-GOGAT). 95% of GOGAT found in plants is the Fd-GOGAT type. Fd-GOGAT is encoded by two genes, *glu1* (AT5G04140) and *glu2* (AT2G41220) found on chromosomes 5 and 2 respectively (in Arabidopsis). Fd-GOGAT (both forms) is highly conserved among plants, red algae, and cyanobacteria.

### Keywords

GLU1;FD-GOGAT;FERREDOXIN-DEPENDENT GLUTAMATE SYNTHASE;FERREDOXIN-DEPENDENT GLUTAMATE SYNTHASE 1;GLS1;GLUS;GLUTAMATE SYNTHASE 1

## GENE INFORMATION

Gene Name

GLU1

Entrez Gene ID

[830292](#)

UniProt ID

[Q9ZNZ7](#)