



# Recombinant Human GAD (DAG4556)

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

## PRODUCT INFORMATION

<b>Species</b>	Human
<b>Purity</b>	>90%
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	ELISA & WB (titer need to be determined)
<b>Molecular Weight</b>	65 kDa
<b>Recommended Usage</b>	Application in indirect ELISA for coating procedure.
<b>Format</b>	Liquid
<b>Size</b>	1 mg
<b>Buffer</b>	20mM PB, pH 7.4
<b>Preservative</b>	None
<b>Storage</b>	Short term: 2-8°C; Long term: -20°C

## BACKGROUND

<b>Introduction</b>	<p>Glutamate decarboxylase or glutamic acid decarboxylase (GAD) is an enzyme that catalyzes the decarboxylation of glutamate to GABA and CO<sub>2</sub>. GAD uses PLP as a cofactor, In mammals, GAD exists in two isoforms encoded by two different genes - GAD1 and GAD2. These isoforms are GAD67 and GAD65 with molecular weights of 67 and 65 kDa, respectively. GAD1 and GAD2 are expressed in the brain where GABA is used as a neurotransmitter, GAD2 is also expressed in the pancreas.</p>
<b>Keywords</b>	Glutamate decarboxylase; glutamic acid decarboxylase; GAD; GAD65-1; GAD65