

Datasheet for ABIN2814068

**anti-Glutathione Synthetase antibody (AbBy Fluor® 594)**[Go to Product page](#)

## Overview

Quantity:	100 µL
Target:	Glutathione Synthetase (GSS)
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Glutathione Synthetase antibody is conjugated to AbBy Fluor® 594
Application:	Western Blotting (WB)

## Product Details

Immunogen:	KLH conjugated synthetic peptide derived from human Glutathione Synthase
Isotype:	IgG
Cross-Reactivity:	Human, Mouse, Rat
Predicted Reactivity:	Dog,Cow,Sheep,Pig,Horse
Purification:	Purified by Protein A.

## Target Details

Target:	Glutathione Synthetase (GSS)
Alternative Name:	GSS/ Glutathione Synthetase ( <a href="#">GSS Products</a> )
Background:	Synonyms: Glutathione synthase; GSH S; GSH synthetase; GSH-S; GSHB_HUMAN; GSHS; GSS antibodyMGC14098; OTTHUMP00000030711.

## Target Details

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Background: GSS (Glutathione synthetase) is a 474 amino acid protein encoded by the gene located at human chromosome 20q11.2. GSS consists of three loops projecting from an antiparallel -sheet, a parallel -sheet and a lid of anti-parallel sheets, which provide access to the ATP-binding site. Although Southern blot and gene analysis suggest that GSS may be the only member of a unique family, the crystal structure indicates that GSS belongs to the ATP-GRASP superfamily. GSS is expressed in hemocytes and nucleated cells, including the brain. GSS occurs as a homodimer. There are two steps in the production of Glutathione, beginning with GSS (Glutathione synthetase) is a 474 amino acid protein encoded by the gene located at human chromosome 20q11.2. GSS consists of three loops projecting from an antiparallel -sheet, a parallel -sheet and a lid of anti-parallel sheets, which provide access to the ATP-binding site. Although Southern blot and gene analysis suggest that GSS may be the only member of a unique family, the crystal structure indicates that GSS belongs to the ATP-GRASP superfamily. GSS is expressed in hemocytes and nucleated cells, including the brain. GSS occurs as a homodimer. There are two steps in the production of Glutathione, beginning with ©-GCS and ending with GSS. In an ATP-dependent reaction, GSS produces Glutathione from ©-glutamylcysteine and glycine precursors. Partial hepatectomy, diethyl maleate, buthionine sulfoximine, tert-butylhydroquinone and thioacetamide increase the ex-pression of GSS, which causes an increase in Glutathione levels. An inherited autosomal recessive disorder, 5-oxoprolinuria (pyroglutamic aciduria), is caused by GSS deficiencies, which leads to central nervous system damage, hemolytic anemia, metabolic acidosis and urinary excretion of 5-oxoproline. A missense mutation in the gene encoding GSS leads to a GSS deficiency restricted to erythrocytes, which causes only hemolytic anemia.-GCS and ending with GSS.

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Pathways: [Warburg Effect](#)

## Application Details

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Application Notes: IF(IHC-P) 1:50-200

Restrictions: For Research Use only

## Handling

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Format: Liquid

Concentration: 1 µg/µL

Buffer: Aqueous buffered solution containing 0.01M TBS ( pH 7.4) with 1 % BSA, 0.03 % Proclin300 and 50 % Glycerol.

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Handling

Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store at -20°C. Aliquot into multiple vials to avoid repeated freeze-thaw cycles.
Expiry Date:	12 months