

### PRODUCT DATA SHEET

Bioworld Technology,Inc.

# Glutathione Synthetase polyclonal antibody

Catalog: BS90587 Host: Rabbit Reactivity: Human, Mouse, Rat

#### **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 β-sheet, a parallel β-sheet and a lid of anti-parallel sheets, which provide access to 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, begining with γ-GCS and ending with GSS. In an ATP-dependent reaction, GSS produces Glutathione from γ-glutamylcysteine and glycine precursors. Partial hepatectomy, diethyl maleate, buthionine sulfoximine, tert-butylhaydroquinone 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.

#### **Product:**

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2

## **Molecular Weight:**

52 kDa

## **Swiss-Prot:**

P48637(Human) P51855(Mouse) P46413(Rat)

### **Purification&Purity:**

ProA affinity purified

# **Applications:**

WB:1:500-1:1,000 ICC:1:50-1:200 IHC:1:50-1:200 FC:1:50-1:100

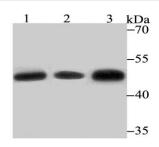
### Storage&Stability:

Store at +4  $^{\circ}$ C after thawing. Aliquot store at -20  $^{\circ}$ C or -80  $^{\circ}$ C. Avoid repeated freeze / thaw cycles.

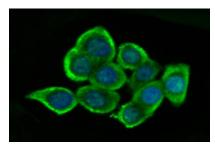
### **Specificity:**

Glutathione Synthetase polyclonal antibody detects endogenous levels of Glutathione Synthetase protein.

#### **DATA:**



Western blot analysis of Glutathione Synthetase on different lysates using anti-Glutathione Synthetase antibody at 1/500 dilution. Positive control: Lane 1: SiHa Lane 2: Mouse colon Lane 3: Rat liver



ICC staining Glutathione Synthetase in LOVO cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

#### Note:

For research use only, not for use in diagnostic procedure.

### Bioworld Technology, Inc.

Add: 1660 South Highway 100, Suite 500 St. Louis Park,

MN 55416,USA.

Email: <u>info@bioworlde.com</u>

Tel: 6123263284 Fax: 6122933841 Bioworld technology, co. Ltd.

Add: No 9, weidi road Qixia District Nanjing, 210046,

P. R. China.

Email: <u>info@biogot.com</u> Tel: 0086-025-68037686 Fax: 0086-025-68035151



# PRODUCT DATA SHEET

Bioworld Technology,Inc.

Bioworld Technology, Inc.

Add: 1660 South Highway 100, Suite 500 St. Louis Park,

MN 55416,USA.

Email: info@bioworlde.com

Tel: 6123263284 Fax: 6122933841 Bioworld technology, co. Ltd.

Add: No 9, weidi road Qixia District Nanjing, 210046,

P. R. China.

Email: <a href="mailto:info@biogot.com">info@biogot.com</a>
Tel: 0086-025-68037686
Fax: 0086-025-68035151