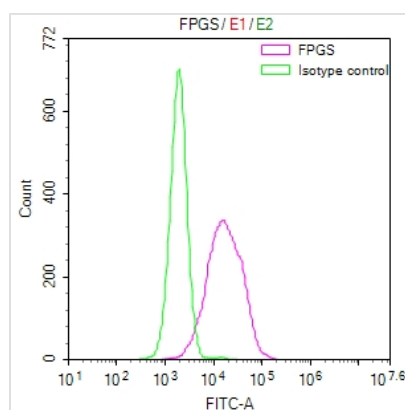




# FPGS Recombinant Monoclonal Antibody

<b>Product Code</b>	CSB-RA983477A0HU
<b>Storage</b>	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
<b>Uniprot No.</b>	Q05932
<b>Immunogen</b>	A synthesized peptide derived from Human FPGS
<b>Species Reactivity</b>	Human
<b>Tested Applications</b>	ELISA, FC; Recommended dilution: FC:1:50-1:200
<b>Form</b>	Liquid
<b>Conjugate</b>	Non-conjugated
<b>Storage Buffer</b>	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
<b>Purification Method</b>	Affinity-chromatography
<b>Isotype</b>	Rabbit IgG
<b>Clonality</b>	Monoclonal
<b>Product Type</b>	Recombinant Antibody
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Research Area</b>	Metabolism;Signal transduction
<b>Gene Names</b>	FPGS
<b>Clone No.</b>	30C11

## Image



Overlay Peak curve showing HepG2 cells stained with CSB-RA983477A0HU (red line) at 1:50. The cells were fixed in 4% formaldehyde and permeated by 0.2% TritonX-100. Then 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (1µg/1\*10<sup>6</sup>cells) for 45min at 4?. The secondary antibody used was FITC-conjugated Goat Anti-rabbit IgG(H+L) at 1:200 dilution for 35min at 4?. Control antibody (green line) was rabbit IgG (1µg/1\*10<sup>6</sup>cells) used under the same conditions. Acquisition of >10,000 events was performed.

## Description

The FPGS recombinant monoclonal antibody is generated through in vitro expression systems developed by cloning the DNA sequences of FPGS antibodies from immunoreactive rabbits. The immunogen employed in this process is a synthesized peptide derived from the human FPGS protein. Subsequently, the genes encoding the FPGS antibodies are inserted into plasmid vectors, and these recombinant plasmid vectors are transfected into host cells to facilitate antibody expression. The FPGS recombinant monoclonal



antibody then undergoes affinity-chromatography purification and is rigorously tested for functionality in ELISA and FC applications. These tests confirm its reactivity with the human FPGS protein.

The main role of FPGS protein is to regulate and enhance the cellular uptake and utilization of folate by converting it into polyglutamate forms. This modification allows folate to be retained within cells, stored for future use, and optimally utilized in essential biochemical processes, including DNA synthesis, amino acid metabolism, and methylation reactions.