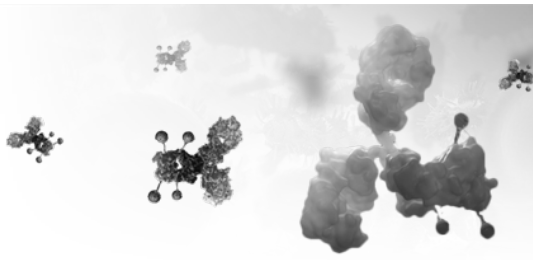

# Rabbit Anti-Human PYGL Polyclonal Antibody (CABT-L2013)

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

## PRODUCT INFORMATION

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| **Product Overview** | Polyclonal Antibody to Glycogen Phosphorylase, Liver (Knockout Validated) |
| **Specificity** | The antibody is a rabbit polyclonal antibody raised against PYGL. It has been selected for its ability to recognize PYGL in immunohistochemical staining and western blotting. |
| **Target** | PYGL |
| **Immunogen** | Recombinant fragment corresponding to human PYGL (Thr341~Gly509) |
| **Isotype** | IgG |
| **Source/Host** | Rabbit |
| **Species Reactivity** | Human, Rat |
| **Purification** | Antigen-specific affinity chromatography followed by Protein A affinity chromatography |
| **Conjugate** | Unconjugated |
| **Applications** | WB |
| **Format** | Liquid |
| **Concentration** | Lot specific |
| **Size** | 200 µg |
| **Buffer** | Supplied as solution form in 0.01M PBS with 50% glycerol, pH7.4. |
| **Preservative** | 0.05% Proclin-300 |

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| **Storage** | Avoid repeated freeze/thaw cycles. Store at 4°C for frequent use. Aliquot and store at -20°C for 12 months. |
| **Ship** | 4°C with ice bags |

# BACKGROUND

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| **Introduction** | This gene encodes a homodimeric protein that catalyses the cleavage of alpha-1,4-glucosidic bonds to release glucose-1-phosphate from liver glycogen stores. This protein switches from inactive phosphorylase B to active phosphorylase A by phosphorylation of serine residue 15. Activity of this enzyme is further regulated by multiple allosteric effectors and hormonal controls. Humans have three glycogen phosphorylase genes that encode distinct isozymes that are primarily expressed in liver, brain and muscle, respectively. The liver isozyme serves the glycemic demands of the body in general while the brain and muscle isozymes supply just those tissues. In glycogen storage disease type VI, also known as Hers disease, mutations in liver glycogen phosphorylase inhibit the conversion of glycogen to glucose and results in moderate hypoglycemia, mild ketosis, growth retardation and hepatomegaly. Alternative splicing results in multiple transcript variants encoding different isoforms.[provided by RefSeq, Feb 2011] |
| **Keywords** | GPLL;GPBB;Hers Disease;Glycogen Storage Disease Type VI |

# GENE INFORMATION

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|---|---|
| **Gene Name** | PYGL phosphorylase, glycogen, liver [ Homo sapiens (human) ] |
| **Official Symbol** | PYGL |
| **Synonyms** | PYGL; phosphorylase, glycogen, liver; GSD6; glycogen phosphorylase, liver form; |
| **Entrez Gene ID** | 5836 |
| **Protein Refseq** | NP_001157412 |
| **UniProt ID** | P06737 |
| **Chromosome Location** | 14q21-q22 |
| **Pathway** | Disease; Glucose metabolism; Glycogen Metabolism; Glycogen breakdown (glycogenolysis); Glycogen storage diseases; Insulin signaling pathway; Metabolic pathways; Metabolism; |
| **Function** | AMP binding; ATP binding; bile acid binding; drug binding; glucose binding; glycogen phosphorylase activity; protein homodimerization activity; purine nucleobase binding; pyridoxal phosphate binding; vitamin binding; |

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