

## Gene

### PFKM

## Associated Diseases

Glycogen Storage Disease Vii  
Glycogen Storage Disease Due To Muscle Phosphofructokinase Deficiency

## Phenotype

### Increased total bilirubin

Increased concentration of total (conjugated and unconjugated) bilirubin in the blood.

### Jaundice

Yellow pigmentation of the skin due to bilirubin, which in turn is the result of increased bilirubin concentration in the bloodstream.

### Exercise intolerance

A functional motor deficit where individuals whose responses to the challenges of exercise fail to achieve levels considered normal for their age and gender.

### Exercise-induced muscle cramps

Sudden and involuntary contractions of one or more muscles brought on by physical exertion.

### Hyperuricemia

An abnormally high level of uric acid in the blood.

### Muscle weakness

Reduced strength of muscles.

### Reticulocytosis

An elevation in the number of reticulocytes (immature erythrocytes) in the peripheral blood circulation.

### Exercise-induced myoglobinuria

Presence of myoglobin in the urine following exercise.

### Gout

Recurrent attacks of acute inflammatory arthritis of a joint or set of joints caused by elevated levels of uric acid in the blood which crystallize and are deposited in joints, tendons, and surrounding tissues.

### Reduced erythrocyte 2,3-diphosphoglycerate concentration

This term refers to an inappropriate low 2,3-DPG concentration in erythrocytes. 2,3-diphosphoglycerate (2,3-DPG) controls the movement of oxygen from red blood cells to tissues. Anemia is usually accompanied by an increased level of 2,3-DPG in order to promote tissue oxygenation.

### Anemia

A reduction in erythrocytes volume or hemoglobin concentration.

**Skeletal muscle atrophy**

The presence of skeletal muscular atrophy (which is also known as amyotrophy).

**Cholelithiasis**

Hard, pebble-like deposits that form within the gallbladder.

**Hemolytic anemia**

A type of anemia caused by premature destruction of red blood cells (hemolysis).

**Autosomal recessive inheritance**

A mode of inheritance that is observed for traits related to a gene encoded on one of the autosomes (i.e., the human chromosomes 1-22) in which a trait manifests in individuals with two pathogenic alleles, either homozygotes (two copies of the same mutant allele) or compound heterozygotes (whereby each copy of a gene has a distinct mutant allele).

**Increased muscle glycogen content**

An increased amount of glycogen in muscle tissue.

**Myotonia**

An involuntary and painless delay in the relaxation of skeletal muscle following contraction or electrical stimulation.