

## Recombinant Human PKM2 Protein (His Tag)

Catalog No. PKSH030367

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

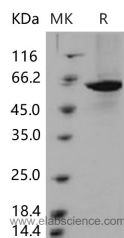
### Description

|                                  |  |
|----------------------------------|--|
| <b>Synonyms</b>                  | CTHBP;HEL-S-30;OIP3;PK3;PKM2;TCB;THBP1 |
| <b>Species</b>                   | Human                                  |
| <b>Expression Host</b>           | E.coli                                 |
| <b>Sequence</b>                  | Ser 2-Pro 531                          |
| <b>Accession</b>                 | P14618-1                               |
| <b>Observed molecular weight</b> | 59 kDa                                 |
| <b>Tag</b>                       | N-His                                  |

### Properties

|                       |   |
|-----------------------|---|
| <b>Purity</b>         | > 90 % as determined by reducing SDS-PAGE.  |
| <b>Storage</b>        | Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.  |
| <b>Shipping</b>       | This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < -20°C. |
| <b>Formulation</b>    | Supplied as sterile PBS, pH 7.0, 10% glycerol   |
| <b>Reconstitution</b> | Please refer to the printed manual for detailed information.  |

### Data



### Background

Pyruvate kinase isozymes M2 also known as pyruvate kinase muscle isozyme 2 (PKM2), pyruvate kinase type K, cytosolic thyroid hormone-binding protein (CTHBP), thyroid hormone-binding protein 1 (THBP1), or opa-interacting protein 3 (OIP3), is an isoenzyme of the glycolytic enzyme pyruvate kinase. Pyruvate kinase isozymes M2 / PKM2 is a protein involved in glycolysis. The encoded protein is a pyruvate kinase that catalyzes the transfer of a phosphoryl group from phosphoenolpyruvate to ADP, generating ATP and pyruvate. PKM2 has been shown to interact with thyroid hormone and may mediate cellular metabolic effects induced by thyroid hormones. PKM2 has been found to bind Opa protein, a bacterial outer membrane protein involved in gonococcal adherence to and invasion of human cells, suggesting a role of this protein in bacterial pathogenesis. Several alternatively spliced transcript variants encoding a few distinct isoforms have been reported. PKM2 functions as a glycolytic enzyme that catalyzes the transfer of a phosphoryl group from phosphoenolpyruvate (PEP) to ADP, generating ATP. PKM2 may stimulates POU5F1-mediated transcriptional

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activation. This protein Plays a general role in caspase independent cell death of tumor cells. The ratio between the highly active tetrameric form and nearly inactive dimeric form determines whether glucose carbons are channeled to biosynthetic processes or used for glycolytic ATP production. The transition between the 2 forms of PKM2 contributes to the control of glycolysis and is important for tumor cell proliferation and survival.