# ACPL2 Protein, Human (HEK293, His)

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| **Cat. No.:** | HY-P76713 |
| **Synonyms:** | 2-phosphoxylose phosphatase 1; Acid phosphatase-like protein 2; PXYLP1; HEL124 |
| **Species:** | Human |
| **Source:** | HEK293 |
| **Accession:** | Q8TE99 (M1-F480) |
| **Gene ID:** | 92370 |
| **Molecular Weight:** | Approximately 50 kDa |

## PROPERTIES

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| **Biological Activity** | The enzyme activity of this recombinant protein is testing in progress, we cannot offer a guarantee yet. |
| **Appearance** | Lyophilized powder. |
| **Formulation** | Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. |
| **Endotoxin Level** | <1 EU/μg, determined by LAL method. |
| **Reconsititution** | It is not recommended to reconstitute to a concentration less than 100 μg/mL in $ddH_2O$. |
| **Storage & Stability** | Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage. |
| **Shipping** | Room temperature in continental US; may vary elsewhere. |

## DESCRIPTION

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| **Background** | The ACPL2 protein assumes a crucial role in the regulation of mature glycosaminoglycan (GAG) chains by catalyzing the 2-O-dephosphorylation of xylose within the glycosaminoglycan-protein linkage region of proteoglycans. This process holds significance in the synthesis of sulfated GAGs, such as heparan sulfate and chondroitin sulfate, on the common GAG-protein linkage region (GlcUAbeta1-3Galbeta1-3Galbeta1-4Xylbeta1-O-Ser) of core proteins. The stepwise addition of monosaccharide residues by specific glycosyltransferases leads to the formation of this linkage region, with xylose 2-O-dephosphorylation serving as a prerequisite for the initiation and efficient elongation of the repeating disaccharide region of GAG chains. ACPL2's enzymatic activity in this context underscores its pivotal role in the fine-tuned control of GAG chain assembly, contributing to the precise regulation of glycosaminoglycan structures. |

**Caution: Product has not been fully validated for medical applications. For research use only.**

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