



[Go to Product page](#)

Datasheet for ABIN7317222
CLPS Protein (His tag)

Overview

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| Quantity: | 100 µg |
| Target: | CLPS |
| Origin: | Human |
| Source: | Baculovirus infected Insect Cells |
| Protein Type: | Recombinant |
| Biological Activity: | Active |
| Purification tag / Conjugate: | This CLPS protein is labelled with His tag. |

Product Details

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|------------------------------|---|
| Purpose: | Recombinant Human CLPS/Colipase Protein (His Tag)(Active) |
| Sequence: | Met 1-Gln 112 |
| Characteristics: | A DNA sequence encoding the human CLPS (P04118) (Met 1-Gln 112) was fused with a polyhistidine tag at the C-terminus. |
| Purity: | > 90 % as determined by reducing SDS-PAGE. |
| Endotoxin Level: | < 1.0 EU per µg as determined by the LAL method. |
| Biological Activity Comment: | Measured by its binding ability in a functional ELISA. Immobilized human CLPS-His at 10µg/mL(100µL/well) can bind biotinylated human PNLIP-His. The EC50 of biotinylated human PNLIP-His is 0.57-1.33µg/mL. |

Target Details

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|---------|------|
| Target: | CLPS |
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Target Details

Alternative Name: CLPS/Colipase ([CLPS Products](#))

Background: Background: Colipase belongs to the colipase family. Structural studies of the complex and of colipase alone have revealed the functionality of its architecture. It is a small protein with five conserved disulphide bonds. Structural analogies have been recognised between a developmental protein, the pancreatic lipase C-terminal domain, the N-terminal domains of lipoxygenases and the C-terminal domain of alpha-toxin. Colipase can only be detected in pancreatic acinar cells, suggesting regulation of expression by tissue-specific elements. Colipase allows lipase to anchor noncovalently to the surface of lipid micelles, counteracting the destabilizing influence of intestinal bile salts. Without colipase the enzyme is washed off by bile salts, which have an inhibitory effect on the lipase. Colipase is a cofactor needed by pancreatic lipase for efficient dietary lipid hydrolysis. It binds to the C-terminal, non-catalytic domain of lipase, thereby stabilising as active conformation and considerably increasing the overall hydrophobic binding site.

Synonym: CLPS

Molecular Weight: 11.5 kDa

UniProt: [P04118](#)

Pathways: [Lipid Metabolism](#)

Application Details

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Please refer to the printed manual for detailed information.

Buffer: Lyophilized from sterile PBS, 500 mM NaCl, pH 7.0, 10 % gly

Storage: 4 °C, -20 °C, -80 °C

Storage Comment: Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.