## Recombinant Human MPST Protein Data Sheet

<table>
<thead>
<tr>
<th>Catalog #</th>
<th>hRP-M0339-EF012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td>100 μg</td>
</tr>
<tr>
<td>Protein Name</td>
<td>3-mercaptopyruvate sulfurtransferase</td>
</tr>
<tr>
<td>Protein Symbol</td>
<td>MPST</td>
</tr>
<tr>
<td>Original Source</td>
<td>Homo sapiens</td>
</tr>
<tr>
<td>Expression System</td>
<td>E.coli</td>
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<tr>
<td>GenBank Accession #</td>
<td>BC018717.1</td>
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<td>Uniprot Accession #</td>
<td>P25325</td>
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### Description
This protein encoded by this gene catalyzes the transfer of a sulfur ion from 3-mercaptopyruvate to cyanide or other thiol compounds. It may be involved in cysteine degradation and cyanide detoxification. There is confusion in literature between this protein (mercaptopyruvate sulfurtransferase, MPST), which appears to be cytoplasmic, and thiosulfate sulfurtransferase (rhodanese, TST, GeneID:7263), which is a mitochondrial protein. Deficiency in MPST activity has been implicated in a rare inheritable disorder known as mercaptolactate-cysteine disulfiduria (MCDU). Alternatively spliced transcript variants encoding same or different isoforms have been identified for this gene.

### Application
WB, ELISA, IP, antibody production, protein array

### Fusion tag
N-His

### Peptide Length
312aa(including fusion tag)

### Molecular Weight
35.6kDa(including fusion tag)

### pI
7.9

### Activity
NA

### Storage
Storage buffer: 20mM Tris.Cl, 50mM NaCl, 50% Glycerol, pH9.0. Store at -80°C and avoid repeated freeze-thaw cycles.

### Purity

### Reference:
- **The mercaptopyruvate pathway in cysteine catabolism: a physiologic role and related disease of the multifunctional 3-mercaptopyruvate sulfurtransferase.**
- **Thioredoxin and dihydrolipoic acid are required for 3-mercaptopyruvate sulfurtransferase to produce hydrogen sulfide.**
- **The effect of three alpha-keto acids on 3-mercaptopyruvate sulfurtransferase activity.**
- **A point mutation in a silencer module reduces the promoter activity for the human**
mercaptopyruvate sulfurtransferase.