

# Dentin Sialophosphoprotein (DSPP) Recombinant Protein | DSPP recombinant protein

Recombinant Dentin Sialophosphoprotein (DSPP)

|                               |                       |                                           |                                               |
|-------------------------------|-----------------------|-------------------------------------------|-----------------------------------------------|
| CATALOG #<br><b>AAA148328</b> | HOST<br><b>E.coli</b> | REACTIVITY<br><b>Homo sapiens (Human)</b> | APPLICATIONS<br><b>Western Blot, SDS-Page</b> |
|-------------------------------|-----------------------|-------------------------------------------|-----------------------------------------------|

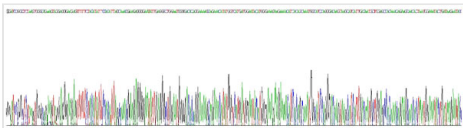
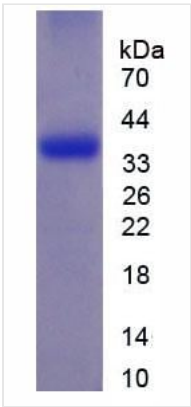
## PRODUCT SYNONYMS

Dentin Sialophosphoprotein (DSPP); Recombinant Dentin Sialophosphoprotein (DSPP); DSP; DFNA39; DGI1; DPP; DTDP2; DMP3; Dentin phosphoprotein; Dentin phosphophoryn; Dentin sialoprotein; DSPP recombinant protein

## PRODUCT SPECIFICATIONS

|                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                                 | E.coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Reactivity                                           | Homo sapiens (Human)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Purity/Purification                                  | > 95%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Form/Format                                          | PBS, pH7.4, containing 0.01% SKL, 5% Trehalose .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Concentration                                        | Original Concentration: 250ug/mL (varies by lot)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Applicable Applications for DSPP recombinant protein | WB (Western Blot), SDS-PAGE, Immunogen, Positive Control                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Source                                               | Prokaryotic expression                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Residues                                             | Gly82~Glu326                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Tags                                                 | N-terminal His Tag                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Subcellular Location                                 | Secreted, Extracellular matrix                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Traits                                               | Freeze-dried powder                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Predicted isoelectric point                          | 4.1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Phenomenon explanation                               | <p>The possible reasons that the actual band size differs from the predicted are as follows:</p> <ol style="list-style-type: none"> <li>1. Splice variants: Alternative splicing may create different sized proteins from the same gene.</li> <li>2. Relative charge: The composition of amino acids may affects the charge of the protein.</li> <li>3. Post-translational modification: Phosphorylation, glycosylation, methylation etc.</li> <li>4. Post-translation cleavage: Many proteins are synthesized as pro-proteins, and then cleaved to give the active form.</li> <li>5. Polymerization of the target protein: Dimerization, multimerization etc.</li> </ol> |
| Usage                                                | Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Preparation and Storage                              | <p><b>Storage:</b><br/>           Avoid repeated freeze/thaw cycles.<br/>           Store at 2-8 degree C for one month.<br/>           Aliquot and store at -80 degree C for 12 months.</p> <p><b>Stability Test:</b><br/>           The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37 degree C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.</p>                                                                                      |

IMAGES



Gene Sequence  
Gene Sequencing (extract)

SDS-PAGE

|            |            |             |            |            |
|------------|------------|-------------|------------|------------|
| NEEGNIEGWN | GDTGKAETYG | HDGIHGKEEN  | GSKWAEVGG  | KSFSTYSTLA |
| RSNTNGNTDK | NTQNGDVGDA | GHNEDEVAVVQ | ITANGIQGV  | SIIDNAGATN |
| ENSCRNEGNT | SEITPQINSK | RNGTKEAEVT  | EDGPQVAGSN | NSTDNEDEII |
| ADEDEECGSG | DDEDEEAGNG | KDSSNNSKGQ  | PGTGEDAGLD | NSDGSPSGNG |
| SKEYYDPEGK | EDPHNEVDGD | KTSKSE      | EGQDHGKEDD | HDSSIGQNSD |

Sequence

ADDITIONAL INFORMATION

|                                                        |                                    |
|--------------------------------------------------------|------------------------------------|
| Product Categories/Family for DSPP recombinant protein | Metabolic pathway; Bone metabolism |
|--------------------------------------------------------|------------------------------------|

NCBI AND UNIPROT INFORMATION

|                                  |                                                                                                                    |
|----------------------------------|--------------------------------------------------------------------------------------------------------------------|
| NCBI GI #                        | 89001107                                                                                                           |
| NCBI GeneID                      | 1834                                                                                                               |
| NCBI Accession #                 | NP_055023.2                                                                                                        |
| NCBI GenBank Nucleotide #        | NM_014208.3                                                                                                        |
| UniProt Accession #              | Q9NZW4; O95815; A8MUJ0                                                                                             |
| Molecular Weight                 | Predicted Molecular Mass: 29.3kDa<br>Accurate Molecular Mass: 39kDa as determined by SDS-PAGE reducing conditions. |
| NCBI Official Full Name          | dentin sialophosphoprotein preproprotein                                                                           |
| NCBI Official Synonym Full Names | dentin sialophosphoprotein                                                                                         |
| NCBI Official Symbol             | DSPP                                                                                                               |
| NCBI Official Synonym Symbols    | DPP; DSP; DGI1; DMP3; DFNA39                                                                                       |
| NCBI Protein Information         | dentin sialophosphoprotein                                                                                         |
| UniProt Protein Name             | Dentin sialophosphoprotein                                                                                         |
| UniProt Gene Name                | DSPP                                                                                                               |
| UniProt Synonym Gene Names       | DPP; DSP                                                                                                           |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.