

## DESCRIPTION

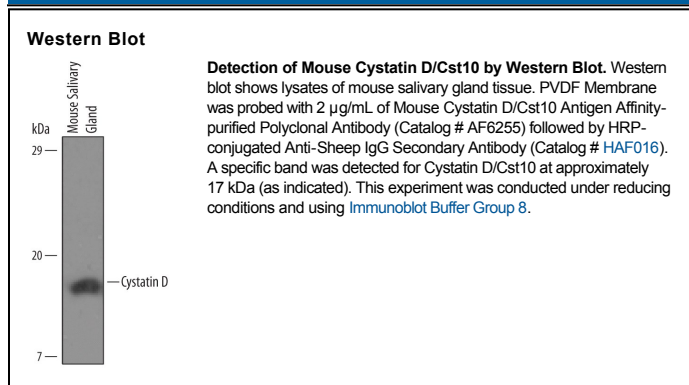
|                           |   |
|---------------------------|---|
| <b>Species Reactivity</b> | Mouse   |
| <b>Specificity</b>        | Detects mouse Cystatin D/Cst10 in direct ELISAs and Western blots. In direct ELISAs, less than 4% cross-reactivity with recombinant human (rh) Cst1, rhCst2, and rhCst3 is observed.    |
| <b>Source</b>             | Polyclonal Sheep IgG  |
| <b>Purification</b>       | Antigen Affinity-purified   |
| <b>Immunogen</b>          | Mouse myeloma cell line NS0-derived recombinant mouse Cystatin D/Cst10<br>Asn30-Phe148<br>Accession # NP_067380   |
| <b>Formulation</b>        | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.<br>*Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS. |

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

|                     | Recommended Concentration | Sample    |
|---------------------|---------------------------|-----------|
| <b>Western Blot</b> | 2 µg/mL                   | See Below |

## DATA



## PREPARATION AND STORAGE

|                                |  |
|--------------------------------|--|
| <b>Reconstitution</b>          | Sterile PBS to a final concentration of 0.2 mg/mL.   |
| <b>Shipping</b>                | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.<br>*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C   |
| <b>Stability &amp; Storage</b> | <b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul> |

## BACKGROUND

Cystatin D (Cystatin 10; also Carminerin) is a 17 kDa member of the type 2 cystatin family of proteins. It is expressed in salivary gland, skin, prehypertrophic and hypertrophic chondrocytes. Within the context of endochondral ossification, it may both induce chondrocyte apoptosis and initiate the process of cartilage calcification. Although Cystatin D contains a key cystatin motif (Gln-x-Val-x-Gly), Cystatin D does not appear to inhibit cysteine proteases. Mouse Cystatin D is 148 amino acids (aa) in length. It contains one cystatin-like domain (aa 39-145). There are two potential splice variants. One shows a deletion of aa 84-121, while a second shows a Val substitution for aa 122-148. Full-length mouse Cystatin D shares 78% aa identity with rat Cystatin D. There appears to be no direct human counterpart to mouse Cystatin D, as both human cystatin-C and -D share less than 40% aa identity with mouse Cystatin D.