

## DESCRIPTION

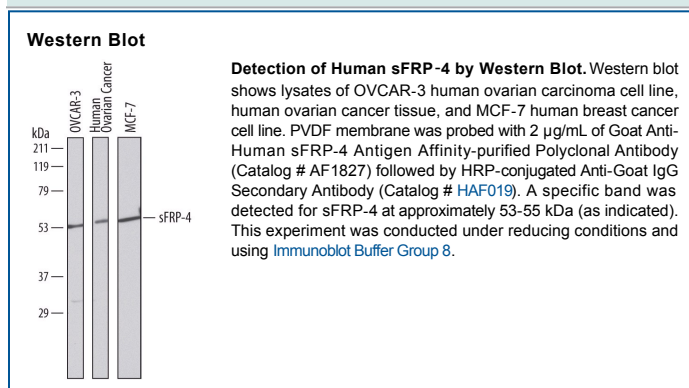
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human sFRP-4 in direct ELISAs and Western blots. In direct ELISAs, approximately 50% cross-reactivity with recombinant mouse (rm) sFRP-4 is observed, and less than 5% cross-reactivity with recombinant human (rh) sFRP-3, rhsFRP-1, and rmsFRP-2 is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant human sFRP-4 Ala22-Val346 Accession # AAC04617
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

## 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.

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

## DATA



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
<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

sFRP-4, also known as DDC-4, Frp, FRPHE and Secreted Frizzled Related Protein 4, is a 50-55 kDa glycoprotein expressed in brain, kidney, lung, ovary, prostate, mammary gland, and endometrium (1, 2). This protein shows complex functions with respect to cell survival: it is up-regulated with apoptosis during ovulation (3), regulates apoptosis in chondrocytes (4), and promotes apoptosis in mammary glands when expressed in transgenic mice (5). On the other hand, sFRP-4 can also act to enhance growth as it is up-regulated in endometrial and breast carcinomas (6, 7). Since it is not detected in other carcinomas such as the ovary, colon, and pancreas, this suggest that its role in cancer is likely to be tissue dependent (6). In addition sFRP-4 is characterized as a circulating phosphatidic factor expressed by tumors associated with osteomalacia that antagonizes renal Wnt signaling (7). Of all the secreted frizzled related proteins, sFRP-4 is most closely related to sFRP-3 (1). Mouse and human sFRP-4 proteins share 92% aa identity.

## References:

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3. Drake, J.M. *et al.* (2003) Apoptosis **8**:389.
4. James, I.E. *et al.* (2000) Osteoarthritis & Cartilage **8**:452.
5. Lacher, M.D. *et al.* (2003) Cell Death Differ. **10**:528.
6. Abu-Jawdeh, G. *et al.* (1999) Lab Investigation **79**:439.
7. Wong, S.C.C. *et al.* (2002) J. Pathology **196**:145.
8. Berndt, T. *et al.* (2003) J. Clin. Invest. **112**:785.