

**DESCRIPTION**

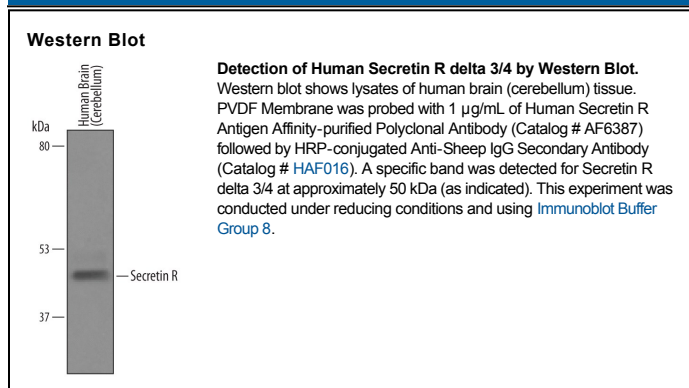
|                           |   |
|---------------------------|---|
| <b>Species Reactivity</b> | Human   |
| <b>Specificity</b>        | Detects human Secretin R delta 3/4 in direct ELISAs and Western blots.  |
| <b>Source</b>             | Polyclonal Sheep IgG  |
| <b>Purification</b>       | Antigen Affinity-purified   |
| <b>Immunogen</b>          | <i>E. coli</i> -derived recombinant human Secretin R delta 3/4 Splice variant (1-3)   |
| <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.

|                     | <b>Recommended Concentration</b> | <b>Sample</b> |
|---------------------|----------------------------------|---------------|
| <b>Western Blot</b> | 1 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**

SCTR (Secretin receptor) is a 51-62 kDa member of the G-protein coupled receptor 2 family. It is found on alveolar epithelium, bile duct epithelium, pancreatic exocrine duct epithelium, and stomach plus duodenal mucosal epithelium. Mature human SCTR is a 418 amino acid (aa) 7-transmembrane glycoprotein (aa 23-440). It contains a 121 aa N-terminal extracellular region (aa 23-143) plus a 48 aa C-terminal cytoplasmic domain (aa 393-440). There is at least one splice variant that shows a deletion of aa 66-101. SCTR forms homodimers and homooligomers, and heterodimerizes with almost all family B GPCRs (VPAC1; VPAC2; GLP1R; GHRHR; etc.). Splice form of human Secretin Receptor with deletion of exons 3 and 4 was found expressed in pancreatic adenocarcinomas and cholangiocellular carcinomas, but not in gastrinomas or nonneoplastic pancreas or liver specimens. The deletion in this splice form is predicted to lead to a frame-shift, early truncation, and total absence of transmembrane segments in the receptor protein, whereas the leader sequence responsible for trafficking of the receptor to the cell membrane is preserved. This encoded a 111-residue peptide with its first 43 residues identical to wild-type receptor; but, subsequent to a shift in coding frame and early truncation, the next 68 residues were unique in the transcriptome/proteome. Our antibody was raised against this unique 68aa sequence resulting from putative frame-shift.

**References:**

1. Hayes, G.M. *et al.* (2007) *Gastroenterology* **133**:853.
2. Korner, M. *et al.* (2005) *Am. J. Pathol.* **167**:959.
3. Korner, M. *et al.* (2006) *J. Hepatol.* **45**:825.