

DESCRIPTION

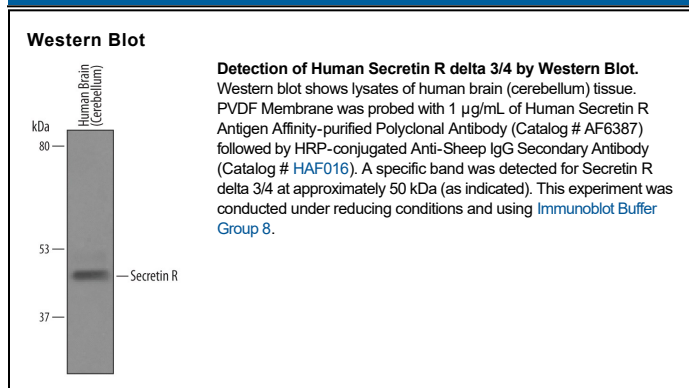
Species Reactivity	Human
Specificity	Detects human Secretin R delta 3/4 in direct ELISAs and Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Secretin R delta 3/4 Splice variant (1-3)
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or 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
Western Blot	1 µg/mL	See Below

DATA



PREPARATION AND STORAGE

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

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:

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