

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human SEC13 in direct ELISAs and Western blots.
<b>Source</b>	Recombinant Monoclonal Rabbit IgG Clone # 1280A
<b>Purification</b>	Protein A or G purified from cell culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human SEC13 Gly123-Gln322 Accession # P55735
<b>Formulation</b>	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.

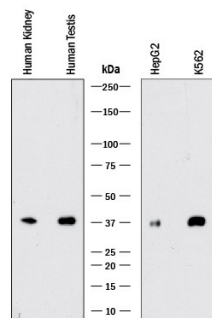
## APPLICATIONS

**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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	0.1 µg/mL	See Below
<b>Immunocytochemistry</b>	0.3-25 µg/mL	See Below

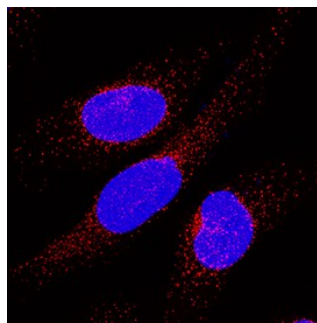
## DATA

### Western Blot



**Detection of SEC13 by Western Blot.** Western blot shows lysates of human kidney tissue, human testis tissue, HepG2 human hepatocellular carcinoma cell line, and K562 human chronic myelogenous leukemia cell line. PVDF membrane was probed with 0.1 µg/mL of Rabbit Anti-Human SEC13 Monoclonal Antibody (Catalog # MAB9055) followed by HRP-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog # HAF008). A specific band was detected for SEC13 at approximately 37 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

### Immunocytochemistry



**SEC13 in HeLa Human Cell Line.** SEC13 was detected in immersion fixed HeLa human cervical epithelial carcinoma cell line using Rabbit Anti-Human SEC13 Monoclonal Antibody (Catalog # MAB9055) at 0.3 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Rabbit IgG Secondary Antibody (red; Catalog # NL004) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm and nuclei. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.5 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. *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

Sec13 is a ubiquitously expressed protein which participates in the formation of vesicles in the COPII complex with Sec23p/Sec24p, Sar1p and Sec31. The COPII vesicle budding complex was first described in the yeast system and was shown to provide coat proteins in the early secretory pathway. Sec13 is recruited to endoplasmic reticulum (ER) membranes where it forms a three dimensional cuboctahedron cage lattice structure by association with Sec31. This vesicular structure is necessary for ER-Golgi transport. Presenilin-1, which is implicated in early-onset Alzheimer's disease has been shown to interact with Sec13 vesicles. Additionally, Sec13 has been shown to be a component of the Y-shaped Nup107-160 subcomplex of the nuclear pore complex (NPC), and the GATOR2 sub-complex of the GATOR complex.