

#### DESCRIPTION

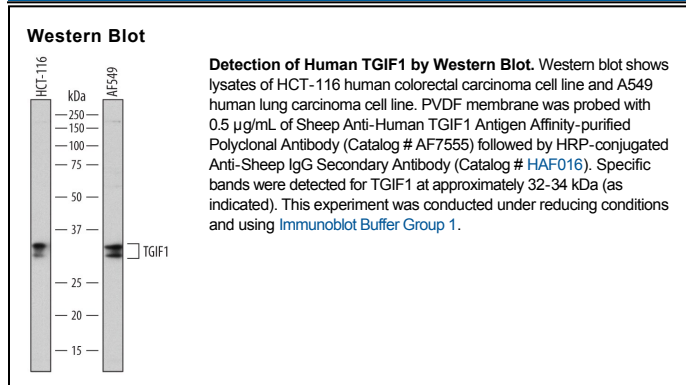
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human TGIF1 in direct ELISAs and Western blots.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human TGIF1 Lys245-Ser359 Accession # Q15583
<b>Formulation</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 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>	0.5 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. *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

TGIF1 (5'-TG[TCA]-3' Interacting Protein 1; also Transforming growth factor beta-induced factor and HPE4) is a 43 kDa (predicted) member of the TALE/TGIF homeobox family of proteins. It is widely expressed, and serves as a transcriptional corepressor for SMAD2-induced gene activation. Evidence suggests that it either complexes with c-jun and cPML, or interacts with HDAC in the nucleus to perform this function. It also binds to RXR response elements, blocking RXR-mediated gene activation. Such interactions are of considerable importance during fetal and neonatal development. Human TGIF1 is 401 amino acids (aa) in length. It contains a DNA-binding homeobox domain (aa 164-226) and two consecutive repressor domains (aa 267-401). There are multiple splice variants. One is very well characterized, is 33-35 kDa in size, and shows a four aa substitution for aa 1-133. This is most active when phosphorylated, which adds approximately 2-4 kDa to its SDS-PAGE MW. Two other splice forms contain a 19 aa substitution for aa 1-134, and utilize an alternative start site at Met150, respectively. Over aa 245-359, human TGIF1 shares 81% aa identity with mouse TGIF1.