

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects endogenous human HIC5 in Western blots.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human HIC5 Val184-Gly288 Accession # O43294
<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.

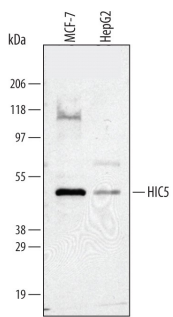
## APPLICATIONS

**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>	1 µg/mL	See Below
<b>Immunocytochemistry</b>	5-15 µg/mL	See Below

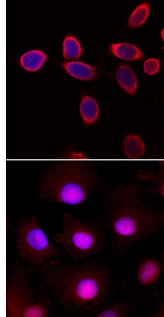
## DATA

**Western Blot**



**Detection of Human HIC5/TGFB11 by Western Blot.** Western blot shows lysates of MCF-7 human breast cancer cell line and HepG2 human hepatocellular carcinoma cell line. PVDF membrane was probed with 1 µg/mL of Goat Anti-Human HIC5/TGFB11 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5626) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). A specific band was detected for HIC5/TGFB11 at approximately 50 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

**Immunocytochemistry**



**HIC5/TGFB11 in PC-3 Human Cell Line.** HIC5/TGFB11 was detected in immersion fixed PC-3 human prostate cancer cell line, unstimulated (upper panel) or stimulated with 10 ng/mL Recombinant Human BMP-4 (Catalog # 314-BP; lower panel), using Goat Anti-Human HIC5/TGFB11 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5626) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm (unstimulated) and nuclei (stimulated). View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

## 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. *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

HIC5 (Hydrogen peroxide inducible clone 5; also ARA55) is a 50-55 kDa group III member of the LIM domain family of proteins. It is expressed primarily in smooth muscle, platelets and myoepithelium. It resides in both cytoplasm and nucleus, and performs multiple functions. It associates with focal adhesions, binds to the nuclear matrix, and serves as a coactivator for the glucocorticoid and androgen receptors. Human HIC5 is 461 amino acids (aa) in length. It contains four Leu:Asp-rich motifs (aa 1-215) and four LIM domains (aa 226-461). LIM domains, either individually, or in combination, perform the majority of functions. LIM4 binds to the nuclear matrix, LIMs 3 and 4 are coactivators, and LIMs 2 and 3 bind to focal adhesions. HIC5 is induced by TGFβ and by hydrogen peroxide.