

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	This antibody detects TCF-2/HNF-1 $\beta$ in direct ELISAs and Western blots. It is expected to recognize all three TCF-2 isoforms. In direct ELISAs and Western blots, less than 1% cross-reactivity with recombinant human (rh) rhTCF-1, rhTCF-3, and rhTCF-4 is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human TCF-2/HNF-1 $\beta$ Gly51-Gln182 Accession # P35680
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 $\mu$ m filtered solution in PBS.

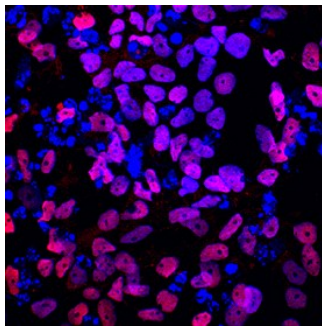
## APPLICATIONS

**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 $\mu$ g/mL	Recombinant Human TCF-2/HNF-1 $\beta$
<b>Immunocytochemistry</b>	5-15 $\mu$ g/mL	See Below
<b>Immunohistochemistry</b>	3-15 $\mu$ g/mL	See Below

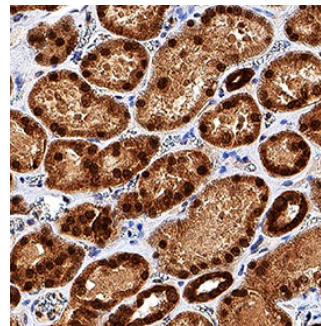
## DATA

### Immunocytochemistry



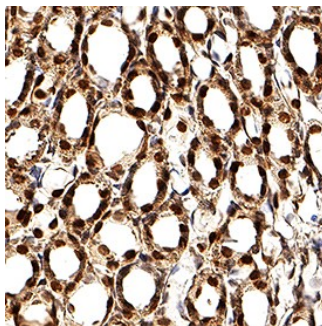
**TCF-2/HNF-1 $\beta$  in BG01V Human Embryonic Stem Cells.** TCF-2/HNF-1 $\beta$  was detected in immersion fixed BG01V human embryonic stem cells differentiated into pancreatic progenitor cells using Goat Anti-Human TCF-2/HNF-1 $\beta$  Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3330) at 10  $\mu$ g/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 nuclei. View our protocol for [Fluorescent ICC Staining of Stem Cells on Coverslips](#).

### Immunohistochemistry



**TCF-2/HNF-1 $\beta$  in Human Kidney.** TCF-2/HNF-1 $\beta$  was detected in immersion fixed paraffin-embedded sections of human kidney using Goat Anti-Human TCF-2/HNF-1 $\beta$  Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3330) at 3  $\mu$ g/mL overnight at 4 °C. Tissue was stained using the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). Specific staining was localized to nuclei in convoluted tubules. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

### Immunohistochemistry



**TCF-2/HNF-1 $\beta$  in Rat Kidney.** TCF-2/HNF-1 $\beta$  was detected in perfusion fixed frozen sections of rat kidney using Goat Anti-Human TCF-2/HNF-1 $\beta$  Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3330) at 3  $\mu$ g/mL overnight at 4 °C. Tissue was stained using the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). Specific staining was localized to nuclei in convoluted tubules. View our protocol for [Chromogenic IHC Staining of Frozen Tissue Sections](#).

## 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

TCF-2, also known as HNF-1 $\beta$  (hepatocyte nuclear factor 1 $\beta$ ) and VHNF-1, is a member of the HNF-1 homeobox family. By alternative splicing, three isoforms of TCF-2/HNF-1 $\beta$  exist. TCF-2/HNF-1 $\beta$  binds DNA as a homodimer or heterodimer with TCF-1/HNF-1 $\alpha$ . Within the region used as the immunogen, human TCF-2 shares 98% amino acid sequence homology with mouse and rat TCF-2. TCF-2 expression is required for visceral endoderm specification.