

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human ONECUT2/OC-2 in direct ELISAs.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human ONECUT2/OC-2 Gln185-Thr326 Accession # O95948
<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.

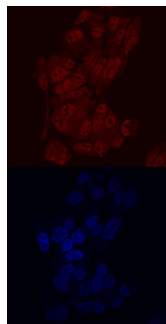
## APPLICATIONS

**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.

	Recommended Concentration	Sample
Immunocytochemistry	5-15 µg/mL	See Below

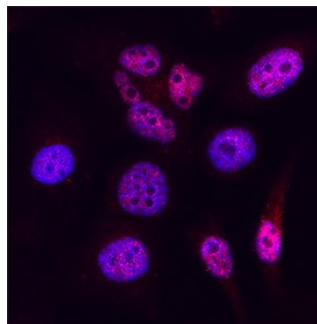
## DATA

### Immunocytochemistry



**ONECUT2/OC-2 in HepG2 Human Cell Line.**  
ONECUT2/OC-2 was detected in immersion fixed HepG2 human hepatocellular carcinoma cell line using Human ONECUT2/OC-2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6294) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Sheep IgG Secondary Antibody (red, upper panel; Catalog # NL010) and counterstained with DAPI (blue, lower panel). Specific staining was localized to nuclei. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

### Immunocytochemistry



**ONECUT2/OC-2 in HeLa Human Cell Line.**  
ONECUT2/OC-2 was detected in immersion fixed HeLa human cervical epithelial carcinoma cell line using Sheep Anti-Human ONECUT2/OC-2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6294) at 5 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Sheep IgG Secondary Antibody (red; Catalog # NL010) and counterstained with DAPI (blue). Specific staining was localized to cell nuclei. Staining was performed using our protocol for [Fluorescent ICC Staining of Non-adherent Cells](#).

## 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

ONECUT2 (one "cut" domain family member 2; also OC-2 and HNF6β) is a monomeric 54 kDa (predicted) member of the One Cut-domain containing class of homeodomain proteins. It is expressed in embryonic neural crest plus hepatic, pancreatic, and intestinal tissue. In the adult, it is found in hepatocytes and small intestine epithelial cells. ONECUT2 is a transcriptional regulator that is known to impact the expression of Ngn3, OPN and Thbs4. This likely contributes to embryonic cell differentiation and migration. Human ONECUT2 is 504 amino acids (aa) in length. It contains two DNA binding regions, one classified as a CUT domain (aa 331-410) and another as a homeobox domain (aa 427-481). There is one potential alternative start site at Met20. Over aa 185-326, human ONECUT2 shares 98% aa identity with mouse ONECUT2.