

## DESCRIPTION

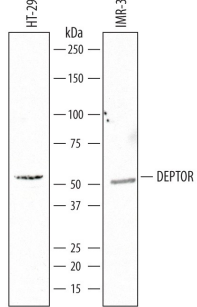
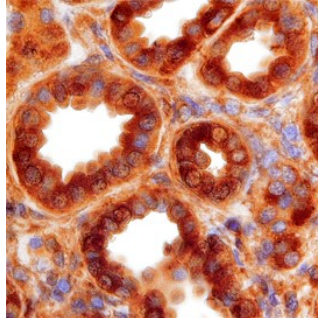
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects recombinant human DEPTOR/DEPDC6 in direct ELISAs and Western blots.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human DEPTOR/DEPDC6 Ala31-Gly158 Accession # Q8TB45
<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
<b>Western Blot</b>	1 µg/mL	See Below
<b>Immunohistochemistry</b>	5-15 µg/mL	See Below

## DATA

<p><b>Western Blot</b></p>  <p><b>Detection of Human DEPTOR/DEPDC6 by Western Blot.</b> Western blot shows lysates of HT-29 human colon adenocarcinoma cell line and IMR-32 human neuroblastoma cell line. PVDF membrane was probed with 1 µg/mL of Sheep Anti-Human DEPTOR/DEPDC6 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7255) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for DEPTOR/DEPDC6 at approximately 50 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 8.</p>	<p><b>Immunohistochemistry</b></p>  <p><b>DEPTOR/DEPDC6 in Human Kidney.</b> DEPTOR/DEPDC6 was detected in immersion fixed paraffin-embedded sections of human kidney using Sheep Anti-Human DEPTOR/DEPDC6 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7255) at 3 µg/mL overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using the Anti-Sheep HRP-DAB Cell &amp; Tissue Staining Kit (brown; Catalog # CTS019) and counterstained with hematoxylin (blue). Specific staining was localized to epithelial cells in convoluted tubules. View our protocol for <a href="#">Chromogenic IHC Staining of Paraffin-embedded Tissue Sections</a>.</p>
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## 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

DEPDC6 (DEP domain-containing protein 6; also DEPTOR) is a 47-48 kDa DEP (Disheveled/Egl10/Pleckstrin) domain-containing protein found in a wide variety of cells. It is a component of the IGF/Ins activated mTOR complexes 1 and 2 (TORC1 and 2) that promote S6K1 and Akt phosphorylation, respectively. Within TORC1, DEPDC6 acts as a natural inhibitor of mTOR kinase, suppressing S6K1 activity. Conversely, this inhibition of mTOR promotes TORC2 activation and Akt activity. In general, a decline in DEPDC6 activity promotes both an increase in cell size and lifespan. Human DEPDC6 is 409 amino acids (aa) in length. It is acetylated on Met1, contains two DEP domains (aa 36-119 and 145-219), and ends with a mTOR-interacting PDZ domain (aa 330-407). There are at least 13 utilized Ser/Thr phosphorylation sites. Although no splice variants have been reported, the highly orthologous mouse form of DEPDC6 does show a 34 aa substitution for the C-terminal 42 aa, suggesting that this splicing event may occur in human. Over aa 31-158, human DEPDC6 shares 98% aa sequence identity with mouse DEPDC6.