

DESCRIPTION

<b>Species Reactivity</b>	Human/Mouse
<b>Specificity</b>	Detects human Adropin in direct ELISAs. Detects human and mouse Adropin in immunocytochemistry.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 976401
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Synthetic peptide containing human Adropin Accession # Q6UWT2
<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.

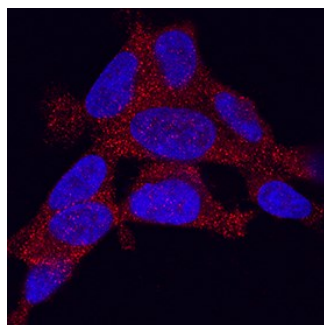
APPLICATIONS

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	5-25 µg/mL	See Below
Immunohistochemistry	5-25 µg/mL	See Below

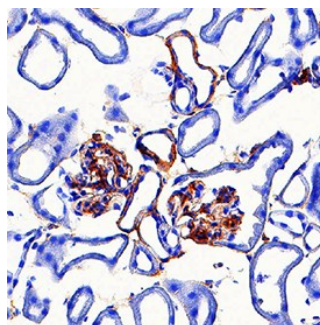
DATA

Immunocytochemistry



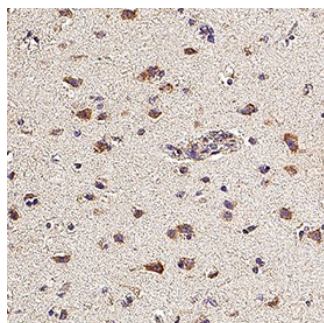
**Adropin in SH-SY5Y Human Cell Line.** Adropin was detected in immersion fixed SH-SY5Y human neuroblastoma cell line using Mouse Anti-Human Adropin Monoclonal Antibody (Catalog # MAB9690) at 25 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

Immunohistochemistry



**Adropin in Mouse Kidney.** Adropin was detected in perfusion fixed frozen sections of mouse kidney using Mouse Anti-Human Adropin Monoclonal Antibody (Catalog # MAB9690) at 5 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Mouse IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC001). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to cytoplasm in glomeruli. View our protocol for [IHC Staining with VisUCyte HRP Polymer Detection Reagents](#).

Immunohistochemistry



**Adropin in Human Brain Cortex.** Adropin was detected in immersion fixed paraffin-embedded sections of human brain cortex using Mouse Anti-Human/Mouse Adropin Monoclonal Antibody (Catalog # MAB9690) at 15 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Mouse IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC001). 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 DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to neuronal cell bodies and processes.

**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Reconstitute at 0.5 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>	<p><b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b></p> <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**

Adropin (from the gene energy homeostasis-associated protein, ENHO) is a 76 amino acid peptide hormone encoded by the gene ENHO. Adropin levels are regulated by nutrition; a high fat diet in lean C57BL/6J mice produced rapid increase in ENHO expression. It is preferentially expressed in brain and has cardiovascular and metabolic roles in the periphery. Adropin plays a role in metabolic homeostasis, fatty acids metabolism control, insulin resistance prevention, Dyslipidemia and impaired glucose tolerance. Adropin level is thought to be a factor in obesity because it plays a role in regulating carbohydrate, lipid and protein metabolisms by moderating glucose-mediated insulin release. High plasma levels of Adropin are associated with heart failure and body mass index. Adropin has also been shown to preserve the blood brain barrier and improve neuronal function after intracerebral hemorrhage in mice.