

DESCRIPTION

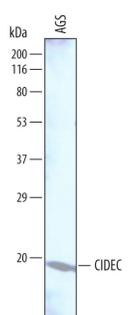
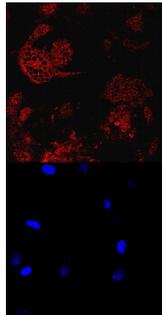
Species Reactivity	Human
Specificity	Detects human CIDEC in direct ELISAs and Western blots. In direct ELISAs, less than 3% cross-reactivity with recombinant human CIDEA is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human CIDEC Met75-His176 Accession # Q96AQ7
Formulation	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
Western Blot	1 µg/mL	See Below
Immunocytochemistry	5-15 µg/mL	See Below

DATA

<p>Western Blot</p>  <p>Detection of Human CIDEC by Western Blot. Western blot shows lysates of AGS human gastric adenocarcinoma cell line. PVDF membrane was probed with 1 µg/mL of Sheep Anti-Human CIDEC Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6960) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for CIDEC at approximately 20 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Immunocytochemistry</p>  <p>CIDEC in Human Mesenchymal Stem Cells. CIDEC was detected in immersion fixed human mesenchymal stem cells differentiated to adipocytes using Sheep Anti-Human CIDEC Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6960) 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 cytoplasm. View our protocol for Fluorescent ICC Staining of Cells on Coverslips.</p>
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PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
Shipping	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
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

CIDE-3 (Cell death-Inducing DNA fragmentation factor-α-like Effector protein 3; also CIDEC and FSP27 in mouse) is a 24-32 kDa member of the CIDE family of molecules. It is a lipid droplet stabilizer that is expressed in hepatocytes and adipocytes, and found to be associated with both mitochondria and the surface of cytoplasmic lipid droplets. CIDE-3 is unstable in the absence of triglycerides and free fatty acids, and is subject to ubiquitin-mediated degradation. In the presence of elevated fatty acids or triglycerides, CIDE-3 half-life is prolonged, and it assists in the formation of lipid droplets. Although other CIDE family members are associated with the initiation of apoptosis, it is unclear if CIDE-3 possesses such activity. Human CIDE-3 is 238 amino acids (aa) in length, and contains one CIDE domain (aa 41-120). There are multiple isoform variants. Two possess alternative start sites, one at Met74, and another 14 aa upstream of the standard site. A third isoform shows an insertion of ten aa after Lys69, while a fourth isoform possesses a 60 aa substitution for aa 70-238. Over aa 75-176, human CIDE-3 shares 84% aa identity with mouse CIDE-3.