

Rabbit Anti-CIDEC antibody

SL6796R

Product Name:	CIDEC
Chinese Name:	细胞死亡活化蛋白抗体
Alias:	Cell Death Activator; Cell death activator CIDE-3; Cell Death Inducing DFFA Like Effector C; Cell death inducing DFFA like effector protein C; Cell death-inducing DFFA-like effector protein C; CIDE 3; CIDE3; CIDE C; CIDEC_HUMAN; Fat specific protein 27; Fat-specific protein FSP27 homolog; FLJ20871; FSP27.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Pig,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-
	Cyt=2ug/TestIF=1:100-500 (Paraffin sections need antigen repair)
	not yet tested in other applications.
	optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	27kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthetic peptide derived from human CIDEC:101-200/238
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	This gene encodes a member of the cell death-inducing DNA fragmentation factor-like effector family. Members of this family play important roles in apoptosis. The encoded protein promotes lipid droplet formation in adipocytes and may mediate adipocyte apoptosis. This gene is regulated by insulin and its expression is positively correlated

with insulin sensitivity. Mutations in this gene may contribute to insulin resistant diabetes. A pseudogene of this gene is located on the short arm of chromosome 3. Alternatively spliced transcript variants that encode different isoforms have been observed for this gene. [provided by RefSeq, Dec 2010].

Tissue specificity: Expressed mainly in small intestine, heart, colon and stomach and, at lower levels, in brain, kidney and liver.

Function:

May act as a CEBPB coactivator in white adipose tissueto control the expression of a subset of CEBPB downstream targetgenes, including SOCS1, SOCS3, TGFB1, TGFBR1, ID2 and XDH (Bysimilarity). Binds to lipid droplets and regulates theirenlargement, thereby restricting lipolysis and favoring storage. Atfocal contact sites between lipid droplets, promotes directionalnet neutral lipid transfer from the smaller to larger lipiddroplets. The transfer direction may be driven by the internal pressure difference between the contacting lipid droplet pair. Whenoverexpressed in preadipocytes, induces apoptosis or increases cells usceptibility to apoptosis induced by serum deprivation or TGFB treatment. As mature adipocytes, that express high CIDEC levels, are quite resistant to apoptotic stimuli, the physiological significance of its role in apoptosis is unclear.

Subunit:

Interacts with CEBPB (By similarity). Interacts with CIDEA.

Subcellular Location:

Nucleus (By similarity). Endoplasmicreticulum (By similarity). Lipid droplet. Note=Diffuses quickly onlipid droplet surface, but becomes trapped and clustered at lipiddroplet contact sites, thereby enabling its rapid enrichment atlipid droplet contact sites.

Tissue Specificity:

Expressed mainly in adipose tissue, smallintestine, heart, colon and stomach and, at lower levels, in brain, kidney and liver.

Post-translational modifications:

Ubiquitinated and targeted to proteasomal degradation, resulting in a short half-life. Protein stability depends ontriacly glycerol synthesis, fatty acid availability and lipiddroplet formation (By similarity).

DISEASE:

Note=In omental adipose tissue of obese patients matchedfor BMI, expression levels tend to correlate with insulinsensitivity. Expression is increased 2-3 fold in the group ofpatients with high insulin sensitivity, compared to theinsulin-resistant group. This observation is consistent with theidea that triglyceride storage in adipocytes plays an importantrole in sequestering triglycerides and fatty acids away from the circulation and peripheral tissues, thus enhancing insulinsensitivity in liver and muscle. This effect is not significant insubcutaneous adipose tissue (PubMed:18509062). In

subcutaneousadipose tissue of diabetic patients, tends to negatively correlate with body mass index and total fat mass, independently of insulinsensitivity (PubMed:18334488).

Similarity:

Contains 1 CIDE-N domain.

SWISS: Q96AQ7

Gene ID: 63924

Database links:

Entrez Gene: 63924Human

Entrez Gene: 14311 Mouse

Entrez Gene: 500292Rat

Omim: 612120Human

SwissProt: Q96AQ7Human

SwissProt: P56198Mouse

SwissProt: Q5XI33Rat

Unigene: 567562Human

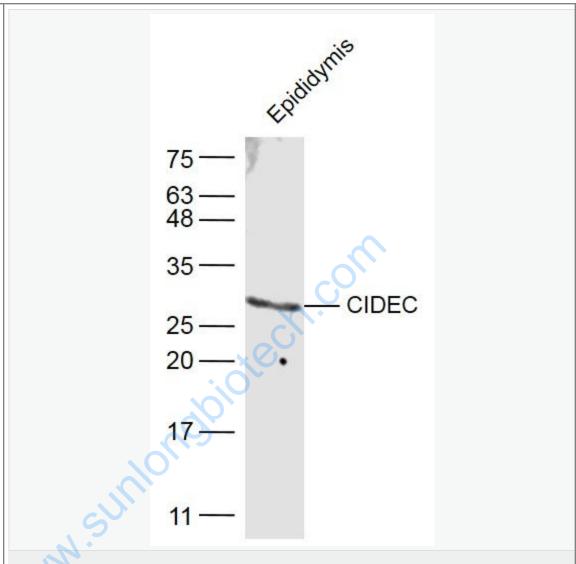
Unigene: 635072Human

Unigene: 10026Mouse

Unigene: 33794Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



Picture:

Sample:

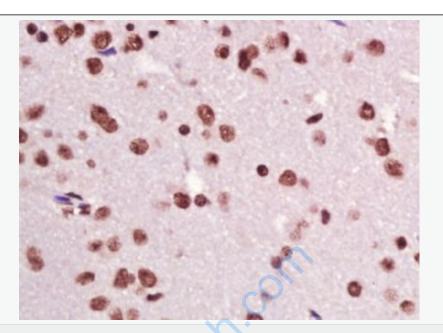
Epididymis (Mouse) Lysate at 40 ug

Primary: Anti-CIDEC (SL6796R) at 1/500 dilution

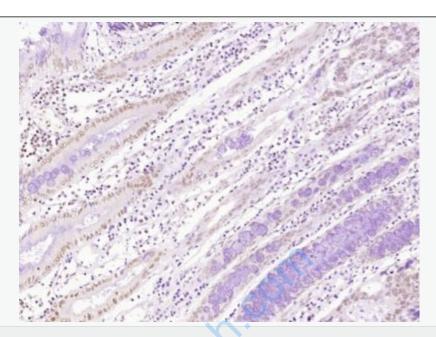
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 27 kD

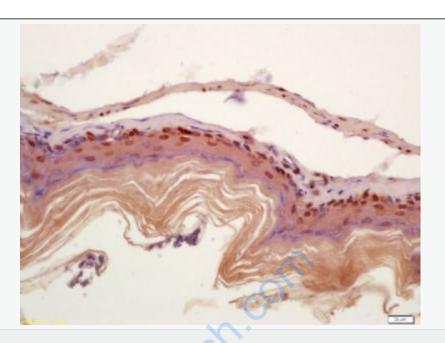
Observed band size: 27 kD



Paraformaldehyde-fixed, paraffin embedded (Rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (CIDEC) Polyclonal Antibody, Unconjugated (SL6796R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



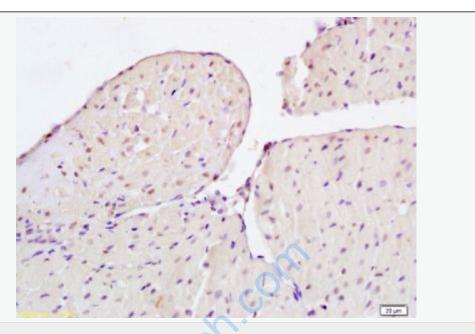
Paraformaldehyde-fixed, paraffin embedded (Human colon carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (CIDEC) Polyclonal Antibody, Unconjugated (SL6796R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Tissue/cell: mouse stomach wall; 4% Paraformaldehyde-fixed and paraffinembedded;

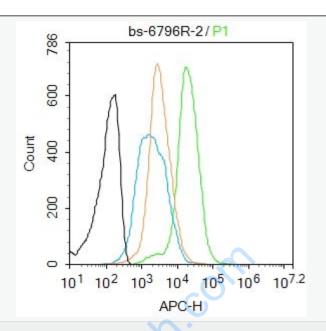
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min;

Incubation: Anti-CIDEC Polyclonal Antibody, Unconjugated(SL6796R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: rat heart tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-CIDEC Polyclonal Antibody, Unconjugated(SL6796R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Blank control: Mouse spleen.

Primary Antibody (green line): Rabbit Anti-CIDEC antibody (SL6796R)

Dilution: 2μg /10⁶ cells;

Isotype Control Antibody (orange line): Rabbit IgG.

Secondary Antibody: Goat anti-rabbit IgG-AF647

Dilution: 1µg/test.

Protocol

The cells were fixed with 4% PFA (10min at room temperature) and then permeabilized with 90% ice-cold methanol for 20 min at-20°C. The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature. Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.