

**Cellular Apoptosis Susceptibility Antibody (C-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP1935a**

**Specification**

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**Cellular Apoptosis Susceptibility Antibody (C-term) - Product Information**

|                   |  |
|-------------------|--|
| Application       | IF, WB, IHC-P,E  |
| Primary Accession | <a href="#">P55060</a>   |
| Other Accession   | <a href="#">O9ERK4</a> , <a href="#">O7SZC2</a> , <a href="#">A5D785</a> |
| Reactivity        | Human, Mouse   |
| Predicted         | Bovine, Zebrafish  |
| Host              | Rabbit   |
| Clonality         | Polyclonal   |
| Isotype           | Rabbit IgG   |
| Antigen Region    | 55-84  |

**Cellular Apoptosis Susceptibility Antibody (C-term) - Additional Information**

**Gene ID** 1434

**Other Names**

Exportin-2, Exp2, Cellular apoptosis susceptibility protein, Chromosome segregation 1-like protein, Importin-alpha re-exporter, CSE1L, CAS, XPO2

**Target/Specificity**

This Cellular Apoptosis Susceptibility antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 55-84 amino acids from the N-terminal region of human Cellular Apoptosis Susceptibility.

**Dilution**

IF~~1:100  
WB~~1:1000  
IHC-P~~1:100

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Cellular Apoptosis Susceptibility Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**Cellular Apoptosis Susceptibility Antibody (C-term) - Protein Information**

**Name** CSE1L

**Synonyms** CAS {ECO:0000303|PubMed:7479798}, XPO2

**Function** Export receptor for importin-alpha. Mediates importin-alpha re-export from the nucleus to the cytoplasm after import substrates (cargos) have been released into the nucleoplasm. In the nucleus binds cooperatively to importin-alpha and to the GTPase Ran in its active GTP-bound form. Docking of this trimeric complex to the nuclear pore complex (NPC) is mediated through binding to nucleoporins. Upon transit of a nuclear export complex into the cytoplasm, disassembling of the complex and hydrolysis of Ran-GTP to Ran-GDP (induced by RANBP1 and RANGAP1, respectively) cause release of the importin-alpha from the export receptor. CSE1L/XPO2 then return to the nuclear compartment and mediate another round of transport. The directionality of nuclear export is thought to be conferred by an asymmetric distribution of the GTP- and GDP-bound forms of Ran between the cytoplasm and nucleus.

**Cellular Location**

Cytoplasm. Nucleus. Note=Shuttles between the nucleus and the cytoplasm.

**Tissue Location**

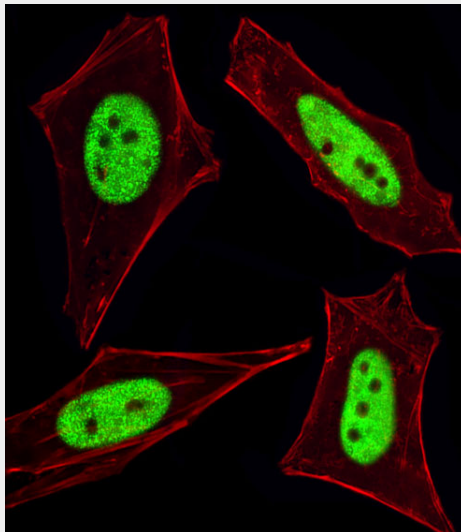
Detected in brain, placenta, ovary, testis and trachea (at protein level) (PubMed:10331944). Widely expressed (PubMed:10331944). Highly expressed in testis and in proliferating cells (PubMed:10331944, PubMed:7479798).

**Cellular Apoptosis Susceptibility Antibody (C-term) - Protocols**

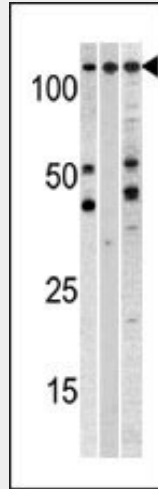
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

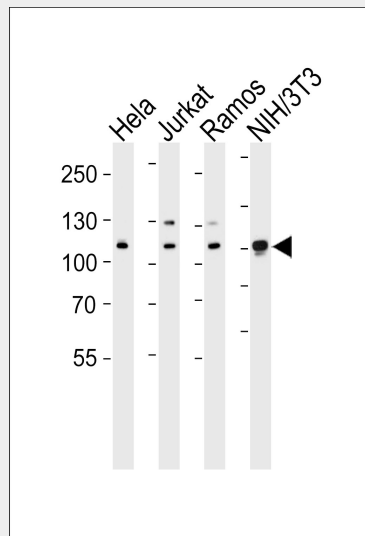
**Cellular Apoptosis Susceptibility Antibody (C-term) - Images**



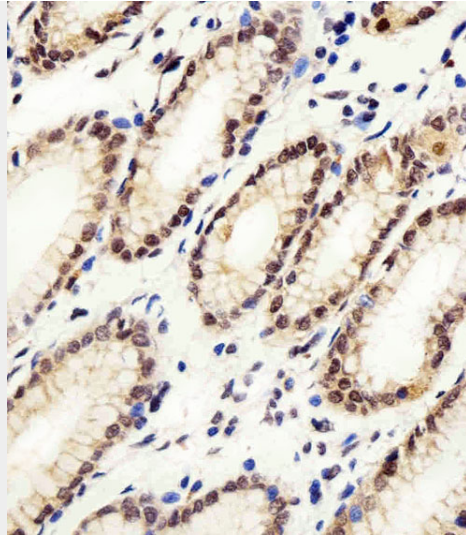
Fluorescent image of HeLa cells stained with Cellular Apoptosis Susceptibility Antibody (N-term) (Cat#AP1935a). AP1935a was diluted at 1:100 dilution. An Alexa Fluor 488-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody (green). Cytoplasmic actin was counterstained with Alexa Fluor® 555 conjugated with Phalloidin (red).



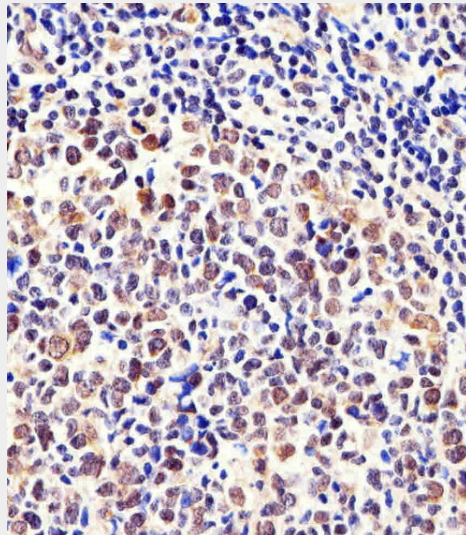
Western blot analysis of anti-CSE1L Pab (Cat. #AP1935a) in, from left to right, A375, CEM, and mouse heart cell line lysates (35ug/lane). CSE1L(arrow) was detected using the purified Pab.



Western blot analysis of lysates from HeLa, Jurkat, Ramos, mouse NIH/3T3 cell line (from left to right), using CSE1L Antibody (Cat. #AP1935a). AP1935a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug per lane.



Immunohistochemical analysis of paraffin-embedded H. stomach section using CSE1L Antibody(Cat#AP1935a). AP1935a was diluted at 1:100 dilution. A peroxidase-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody, followed by DAB staining.



Immunohistochemical analysis of paraffin-embedded H. tonsil section using CSE1L Antibody(Cat#AP1935a). AP1935a was diluted at 1:100 dilution. A peroxidase-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody, followed by DAB staining.

### **Cellular Apoptosis Susceptibility Antibody (C-term) - Background**

Proteins that carry a nuclear localization signal (NLS) are transported into the nucleus by the importin-alpha/beta heterodimer. Importin-alpha binds the NLS, while importin-beta mediates translocation through the nuclear pore complex. After translocation, RanGTP binds importin-beta and displaces importin-alpha. Importin-alpha must then be returned to the cytoplasm, leaving the NLS protein behind. CSE1L binds strongly to NLS-free importin-alpha, and this binding is released in the cytoplasm by the combined action of RANBP1 and RANGAP1. In addition, CSE1L may play a role both in apoptosis and in cell proliferation.

### **Cellular Apoptosis Susceptibility Antibody (C-term) - References**

Goldberg, G.S., et al., J. Biol. Chem. 278(47):46533-46540 (2003).  
Behrens, P., et al., Apoptosis 8(1):39-44 (2003).

Jiang, M.C., et al., Biochem. Biophys. Res. Commun. 294(4):900-905 (2002).

Wellmann, A., et al., Int. J. Mol. Med. 7(5):489-494 (2001).

Brinkmann, U., et al., Genomics 58(1):41-49 (1999).

**Cellular Apoptosis Susceptibility Antibody (C-term) - Citations**

- [Differential distributions of CSE1L/CAS and E-cadherin in the polarized and non-polarized epithelial glands of neoplastic colorectal epithelium.](#)
- [Serum cellular apoptosis susceptibility protein is a potential prognostic marker for metastatic colorectal cancer.](#)
- [Higher prevalence of secretory CSE1L/CAS in sera of patients with metastatic cancer.](#)