

## **RAET1E Antibody**

Catalog # ASC11930

#### **Specification**

# **RAET1E Antibody - Product Information**

Application WB
Primary Accession P84103

Other Accession
Reactivity
Host
Reablit

Clonality Polyclonal Isotype IgG

Calculated MW Predicted: 29 kDa

Observed: 29 kDa KDa

Application Notes

RAET1E antibody can be used for detection of RAET1E by Western blot at 1 - 2 µg/ml.

## **RAET1E Antibody - Additional Information**

Gene ID 135250

Target/Specificity

RAET1E; RAET1E antibody is human and mouse reactive. At least four isoforms of RAET1E are known to exist; this antibody will detect all four.

#### **Reconstitution & Storage**

RAET1E antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

#### **Precautions**

RAET1E Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### **RAET1E Antibody - Protein Information**

Name SRSF3

Synonyms SFRS3, SRP20

#### **Function**

Splicing factor, which binds the consensus motif 5'- C[ACU][AU]C[ACU][AC]C-3' within pre-mRNA and promotes specific exons inclusion during alternative splicing (PubMed:<a href="http://www.uniprot.org/citations/17036044" target="\_blank">17036044</a>, PubMed:<a href="http://www.uniprot.org/citations/26876937" target="\_blank">26876937</a>, PubMed:<a href="http://www.uniprot.org/citations/32440474" target="\_blank">32440474</a>). Interaction with YTHDC1, a RNA- binding protein that recognizes and binds N6-methyladenosine (m6A)-containing RNAs, promotes recruitment of SRSF3 to its mRNA-binding elements adjacent to m6A sites within exons (PubMed:<a href="http://www.uniprot.org/citations/26876937" target="\_blank">26876937</a>). Also functions as an adapter involved in mRNA nuclear export (PubMed:<a href="http://www.uniprot.org/citations/11336712" target="\_blank">11336712</a>,



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PubMed:<a href="http://www.uniprot.org/citations/18364396" target=" blank">18364396</a>, PubMed:<a href="http://www.uniprot.org/citations/28984244" target="\_blank">28984244</a>). Binds mRNA which is thought to be transferred to the NXF1-NXT1 heterodimer for export (TAP/NXF1 pathway); enhances NXF1-NXT1 RNA-binding activity (PubMed:<a href="http://www.uniprot.org/citations/11336712" target="\_blank">11336712</a>, PubMed:<a href="http://www.uniprot.org/citations/18364396" target="blank">18364396</a>). Involved in nuclear export of m6A- containing mRNAs via interaction with YTHDC1: interaction with YTHDC1 facilitates m6A-containing mRNA-binding to both SRSF3 and NXF1, promoting mRNA nuclear export (PubMed:<a href="http://www.uniprot.org/citations/28984244" target="\_blank">28984244</a>).

#### **Cellular Location**

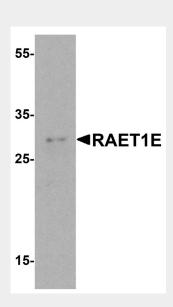
Nucleus. Nucleus speckle. Cytoplasm. Note=Recruited to nuclear speckles following interaction

### **RAET1E Antibody - Protocols**

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

### **RAET1E Antibody - Images**



Western blot analysis of RAET1E in EL4 cell lysate with RAET1E antibody at 1 µg/ml.

#### RAET1E Antibody - Background

The Retinoic acid early transcript 1E (RAET1E) belongs to the RAET1 family, which consists of major histocompatibility complex (MHC) class I-related genes located in a cluster on chromosome 6q24.2-q25.3 (1). Like the related protein RAET1G, RAET1E differs from other RAET1 proteins in that





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they have type I membrane-spanning sequences at their carboxy termini rather than glycosylphosphatidylinositol anchor sequences (2). RAET1E functions as a ligand for NKG2D receptor, which is expressed on the surface of several types of immune cells, and is involved in innate and adaptive immune responses (1,3).

## **RAET1E Antibody - References**

Radosavlijevic M, Cuillerier B, Wilson MJ, et al. A cluster of ten novel MHC class I related genes on human chromosome 6g24.2-g25.3. Genomics 2002; 79:114-23.

Bacon L, Eagle RA, Meyer M, et al. Two human ULBP/RAET1 molecules with transmembrane regions are ligands for NKG2D. J. Immunol. 2004; 173:1078-84.

Letal, a tumor-associated NKG2D immunoreceptor ligand, induces activation and expansion of effector immune cells. Cancer Biol. Ther. 2003; 2:446-51.