

# RAET1E Antibody

Catalog # ASC11930

### **Product Information**

Application	WB, E
Primary Accession	<u>P84103</u>
Other Accession	<u>NP_631904, 21040249</u>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	19330
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	RAET1E antibody can be used for detection of RAET1E by Western blot at 1 - 2 ፲g/ml.

# **Additional Information**

Gene ID Other Names	6428 Serine/arginine-rich splicing factor 3, Pre-mRNA-splicing factor SRP20, Splicing factor, arginine/serine-rich 3, SRSF3, SFRS3, SRP20
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.

# **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: <u>17036044</u> , PubMed: <u>26876937</u> , PubMed: <u>32440474</u> ). 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: <u>26876937</u> ). Also functions as an adapter involved in mRNA nuclear export (PubMed: <u>11336712</u> , PubMed: <u>18364396</u> , PubMed: <u>28984244</u> ). 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: <u>11336712</u> , PubMed: <u>18364396</u> ). 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: <u>28984244</u> ).
Cellular Location	Nucleus. Nucleus speckle. Cytoplasm. Note=Recruited to nuclear speckles following interaction with YTHDC1.

### 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 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).

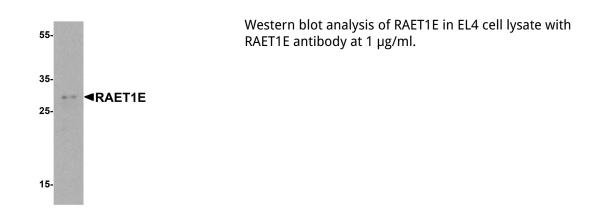
#### References

Radosavlijevic M, Cuillerier B, Wilson MJ, et al. A cluster of ten novel MHC class I related genes on human chromosome 6q24.2-q25.3. 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.

# Images



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