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RAET1E Antibody

Catalog # ASC11930

Product Information

Application	WB, E
Primary Accession	P84103
Other Accession	NP_631904, 21040249
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 g/ml.

Additional Information

Gene ID	6428
Other Names	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℃ for three months and -20℃, 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:17036044, PubMed:26876937, PubMed:32440474). 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:26876937). Also functions as an adapter involved in mRNA nuclear export (PubMed:11336712, PubMed:18364396, PubMed:28984244). 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:11336712, PubMed:18364396). 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:28984244).
Cellular Location	Nucleus. Nucleus speckle. Cytoplasm. Note=Recruited to nuclear speckles following interaction with YTHDC1.

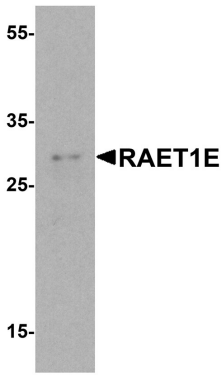
Background

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



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