10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# L1TD1 Antibody

Catalog # ASC11358

## Product Information

| | |
|---|---|
| **Application** | WB, E |
| **Primary Accession** | Q5T7N2 |
| **Other Accession** | NP_061952, 157694505 |
| **Reactivity** | Human |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | IgG |
| **Calculated MW** | 98850 |
| **Concentration (mg/ml)** | 1 mg/mL |
| **Conjugate** | Unconjugated |
| **Application Notes** | L1TD1 antibody can be used for detection of L1TD1 by Western blot at 1 g/mL. |

## Additional Information

| | |
|---|---|
| **Gene ID** | 54596 |
| **Other Names** | LINE-1 type transposase domain-containing protein 1, ES cell-associated protein 11, L1TD1, ECAT11 |
| **Target/Specificity** | L1TD1; L1TD1 antibody is predicted to not cross-react with other ECAT protein family members |
| **Reconstitution & Storage** | L1TD1 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures. |
| **Precautions** | L1TD1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

| | |
|---|---|
| **Name** | L1TD1 |
| **Synonyms** | ECAT11 |
| **Function** | RNA-binding protein which plays a role in the regulation of pluripotency. Preferentially binds to 5'-GAGCGU-3' sequences. Binds to the 3'-UTR of the pluripotency regulator TFCP2L1, stabilizing transcripts and resulting in increased TFCP2L1 mRNA levels. |
| **Cellular Location** | Note=Forms punctate condensates in epiblast stem cells. {ECO:0000250\|UniProtKB:Q587J6} |

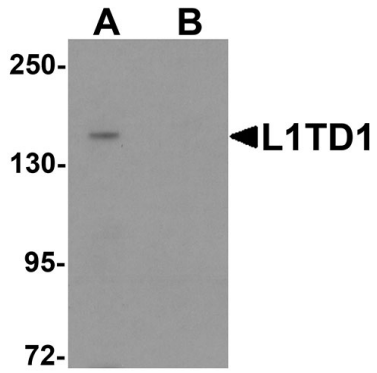
## Background

L1TD1 Antibody: L1TD1 (ECAT11) is a member of the family of Embryonic Stem Cell Associated Transcripts (ECAT) that play an important role in stem cell biology. ECAT4 (Nanog) is a master regulator for the maintenance of mESC and hESC. ECAT5 was identified to be Embryonic stem cell expressed Ras (ERas), a Ras-like oncogene that is important in regulating mESC proliferation. ECAT9 (GDF3) is an important factor that helps maintain mESC pluripotency by inhibiting bone morphogenetic protein (BMP) signaling. L1TD1 is highly enriched in undifferentiated hESC and L1TD1 is a target gene of Nanog.

## References

Iwabuchi KA, Yamakawa T, Sato Y, et al. ECAT11/L1td1 is enriched in ESCs and rapidly activated during iPSC generation, but it is dispensable for the maintenance and induction of pluripotency. PLoS One. 2011; 6:e20461.
Mitsui K, Tokuzawa Y, Itoh H, et al. The homeoprotein Nanog is required for maintenance of pluripotency in mouse epiblast and ES cells. Cell 2003; 113:631-42
Takahashi K, Mitsui K, Yamanaka S. Role of ERas in promoting tumour-like properties in mouse embryonic stem cells. Nature 2003; 423:541-5
Wong RC, Ibrahim A, Fong H, et al. L1TD1 is a marker for undifferentiated human embryonic stem cells. PLoS One 2011;6:e19355.

## Images




Western blot analysis of L1TD1 in Jurkat cell lysate with L1TD1 antibody at 1 µg/mL in (A) the absence and (B) the presence of blocking peptide.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.