

# ILEI (3A3): sc-293387

## BACKGROUND

ILEI (interleukin-like Emt inducer), also known as FAM3C (family with sequence similarity 3, member C), is a 227 amino acid, ubiquitously expressed protein containing an amino-terminal signal peptide. Elevated levels of ILEI translation are observed in oncogenic, Ras-transformed mammary epithelial cells and epithelial to mesenchymal transition (Emt) as well as tumor growth and metastasis. Also, overexpression of ILEI results in loss of ZO-1, a protein involved in tight junctions, and expression of cytoplasmic E-cadherin, which has been shown to influence loss of polarity and invasiveness. Due to this evidence, it is suspected that ILEI cooperates with oncogenic Ras to cause TGF $\beta$ -independent Emt and its overexpression is correlated with the invasion, metastasis and survival in a variety of cancers.

## REFERENCES

1. Zhu, Y., et al. 2002. Cloning, expression and initial characterization of a novel cytokine-like gene family. *Genomics* 80: 144-150.
2. Cao, X., et al. 2003. Pancreatic-derived factor (FAM3B), a novel islet cytokine, induces apoptosis of Insulin-secreting  $\beta$ -cells. *Diabetes* 52: 2296-2303.
3. Pilipenko, V.V., et al. 2004. Genomic organization and expression analysis of the murine FAM3C gene. *Gene* 335: 159-168.
4. Online Mendelian Inheritance in Man, OMIM<sup>™</sup>. 2004. Johns Hopkins University, Baltimore, MD. MIM Number: 608618. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
5. Mauri, P., et al. 2005. Identification of proteins released by pancreatic cancer cells by multidimensional protein identification technology: a strategy for identification of novel cancer markers. *FASEB J.* 19: 1125-1127.
6. Waerner, T., et al. 2006. ILEI: a cytokine essential for Emt, tumor formation and late events in metastasis in epithelial cells. *Cancer Cell* 10: 227-239.
7. Guo, J., et al. 2006. GG: a domain involved in phage LTF apparatus and implicated in human MEB and non-syndromic hearing loss diseases. *FEBS Lett.* 580: 581-584.
8. Gronborg, M., et al. 2006. Biomarker discovery from pancreatic cancer secretome using a differential proteomic approach. *Mol. Cell. Proteomics* 5: 157-171.
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## CHROMOSOMAL LOCATION

Genetic locus: FAM3C (human) mapping to 7q31.31.

## SOURCE

ILEI (3A3) is a mouse monoclonal antibody raised against amino acids 25-227 representing full length ILEI of human origin.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PRODUCT

Each vial contains 100  $\mu$ g IgG<sub>2a</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

ILEI (3A3) is recommended for detection of ILEI of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ILEI siRNA (h): sc-89829, ILEI shRNA Plasmid (h): sc-89829-SH and ILEI shRNA (h) Lentiviral Particles: sc-89829-V.

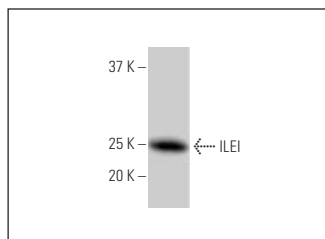
Molecular Weight of ILEI: 25 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201.

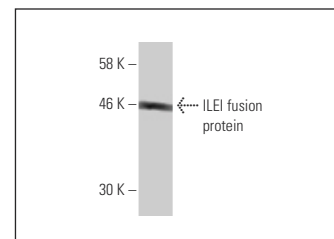
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

## DATA



ILEI (3A3): sc-293387. Western blot analysis of ILEI expression in A-431 whole cell lysate.



ILEI (3A3): sc-293387. Western blot analysis of human recombinant ILEI fusion protein.

## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.