

# LAGE-3 (P-19): sc-243234

## BACKGROUND

LAGE-3 (L antigen family member 3), also known as DXS9879E, ESO3 or ITBA2, is a 143 amino acid protein belonging to the CTAG family. Members of the LAGE/ESO gene family are clustered together on human chromosome Xq28 and have similar exon-intron structures. Unlike the other family members, which are normally expressed only in testis and activated in a wide range of human tumors, LAGE-3 is ubiquitously expressed in somatic tissues. LAGE-3 is also highly conserved in mouse and rat, suggesting that the encoded protein is functionally important. The gene encoding LAGE-3 maps to mouse chromosome X A7.3. An intronless pseudogene with high sequence similarity to this gene is located on human chromosome 9.

## REFERENCES

- Faranda, S., et al. 1996. Characterization and fine localization of two new genes in Xq28 using the genomic sequence/EST database screening approach. *Genomics* 34: 323-327.
- Chen, Y.T., et al. 1997. Genomic cloning and localization of CTAG, a gene encoding an autoimmunogenic cancer-testis antigen NY-ESO-1, to human chromosome Xq28. *Cytogenet. Cell Genet.* 79: 237-240.
- Léthé, B., et al. 1998. LAGE-1, a new gene with tumor specificity. *Int. J. Cancer* 76: 903-908.
- Aarnoudse, C.A., et al. 1999. Interleukin-2-induced, melanoma-specific T cells recognize CAMEL, an unexpected translation product of LAGE-1. *Int. J. Cancer* 82: 442-448.
- Aradhya, S., et al. 2001. Multiple pathogenic and benign genomic rearrangements occur at a 35 kb duplication involving the NEMO and LAGE2 genes. *Hum. Mol. Genet.* 10: 2557-2567.
- Alpen, B., et al. 2002. A new member of the NY-ESO-1 gene family is ubiquitously expressed in somatic tissues and evolutionarily conserved. *Gene* 297: 141-149.

## CHROMOSOMAL LOCATION

Genetic locus: LAGE3 (mouse) mapping to X A7.3.

## SOURCE

LAGE-3 (P-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of LAGE-3 of mouse origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-243234 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## APPLICATIONS

LAGE-3 (P-19) is recommended for detection of LAGE-3 of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with LAGE-1, LAGE-1B or LAGE-2A.

Suitable for use as control antibody for LAGE-3 siRNA (h): sc-90924, LAGE-3 shRNA Plasmid (h): sc-90924-SH and LAGE-3 shRNA (h) Lentiviral Particles: sc-90924-V.

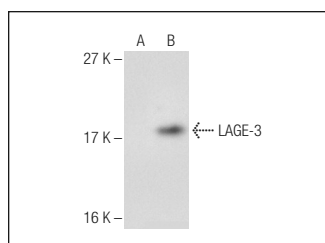
Molecular Weight of LAGE-3: 15 kDa.

Positive Controls: LAGE-3 (m): 293T Lysate: sc-121277.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



LAGE-3 (P-19): sc-243234. Western blot analysis of LAGE-3 expression in non-transfected: sc-117752 (A) and mouse LAGE-3 transfected: sc-121277 (B) 293T whole cell lysates.

## RESEARCH USE

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


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Try **LAGE-3 (E-2): sc-515776**, our highly recommended monoclonal alternative to LAGE-3 (P-19).