

# LAGE-3 (Q-16): sc-243233

## 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

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- 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.
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- 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.
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- 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.
- Ratnamala, U., et al. 2011. Refinement of the X-linked nonsyndromic high-grade myopia locus (MYP1) on Xq28 and exclusion of 13 known positional candidate genes by direct sequencing. *Invest. Ophthalmol. Vis. Sci.* 52: 6814-6419.

## CHROMOSOMAL LOCATION

Genetic locus: Lage3 (mouse) mapping to X A7.3.

## SOURCE

LAGE-3 (Q-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus 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-243233 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

LAGE-3 (Q-16) 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 (m): sc-146637, LAGE-3 shRNA Plasmid (m): sc-146637-SH and LAGE-3 shRNA (m) Lentiviral Particles: sc-146637-V.

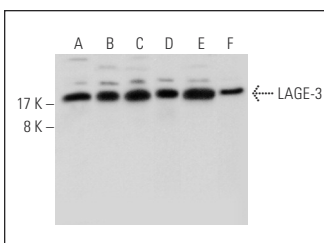
Molecular Weight of LAGE-3: 15 kDa.

Positive Controls: mouse testis extract: sc-2405, mouse heart extract: sc-2254 or KNRK nuclear extract: sc-2141.

## 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 (Q-16): sc-243233. Western blot analysis of LAGE-3 expression in mouse testis (A) and mouse heart (B) tissue extracts, PC-12 (C) and mouse PBL (D) whole cell lysates and KNRK (E) and WEHI-231 (F) nuclear extracts.

## STORAGE

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

## RESEARCH USE

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

## PROTOCOLS

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