

LAGE-3 (E-2): sc-515776

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

1. 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.
2. 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.
3. Lethe, B., et al. 1998. LAGE-1, a new gene with tumor specificity. *Int. J. Cancer* 76: 903-908.
4. 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.

CHROMOSOMAL LOCATION

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

SOURCE

LAGE-3 (E-2) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 1-20 at the N-terminus of LAGE-3 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

LAGE-3 (E-2) is available conjugated to agarose (sc-515776 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515776 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515776 PE), fluorescein (sc-515776 FITC), Alexa Fluor[®] 488 (sc-515776 AF488), Alexa Fluor[®] 546 (sc-515776 AF546), Alexa Fluor[®] 594 (sc-515776 AF594) or Alexa Fluor[®] 647 (sc-515776 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-515776 AF680) or Alexa Fluor[®] 790 (sc-515776 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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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 (E-2) is recommended for detection of LAGE-3 of mouse and rat origin by Western Blotting (starting dilution 1:100, 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).

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.

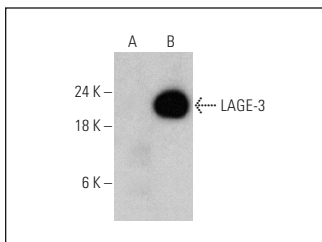
Molecular Weight of LAGE-3: 15 kDa.

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

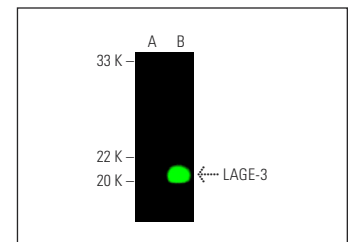
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
 1) Western Blotting: use m-IgGκ BPHRP: sc-516102 or m-IgGκ BPHRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] 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). 3) Immunofluorescence: use m-IgGκ BPFITC: sc-516140 or m-IgGκ BPE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



LAGE-3 (E-2): sc-515776. 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.



LAGE-3 (E-2): sc-515776. Near-infrared 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. Blocked with UltraCruz[®] Blocking Reagent: sc-516214. Detection reagent used: m-IgGκ BPFITC: sc-516180.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.