LAG-3 (human) monoclonal antibody (17B4) (FITC conjugate)

The lymphocyte activation gene-3 (LAG-3, CD223), a member of the immunoglobulin superfamily (IgSF) related to CD4, binds to the major histocompatibility complex (MHC) class II molecules but with higher affinity than CD4. Several alternative mRNA splice-variants of human LAG-3 have been described, two of them encoding potential secreted forms: LAG-3V1 (i.e. the D1-D2 domains of the protein, 36 kDa) and LAG-3V3 (D1-D3, 52 kDa). The longer form was detected by ELISA in the serum of healthy individuals as well as of tuberculosis patients with a favorable outcome. LAG-3 expression by T cell clones correlated with IFN-γ production, and hence soluble LAG-3 has been suggested as a serological marker of Th1 responses.

This antibody is covered by our Worry-Free Guarantee.

Citations: 27 View Online »

Ordering Information Order Online »

ALX-804-806F-C100	FITC - 100µg

Manuals, SDS & CofA View Online »

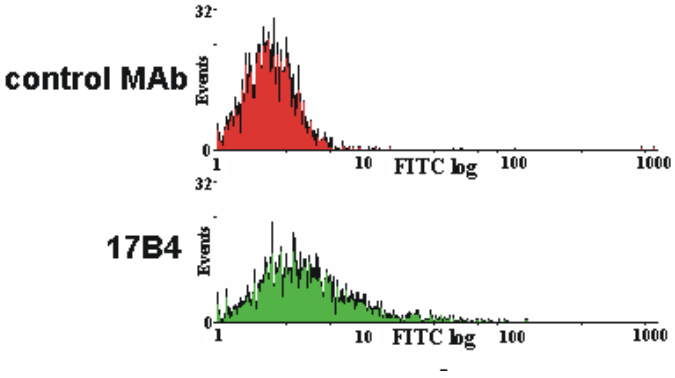

Figure: LAG-3 expression on activated human peripheral blood mononuclear cells (PBMC) detected with LAG-3 (human), mAb (17B4) (FITC) (Prod. No. ALX-804-806F).**Method:** T lymphocytes from human PBMC are stimulated with 1µg/ml of PHA for three days. Then, after seven days of culture, 3×10^6 three-days PHA-activated human PBMC are treated with LAG-3 (human), mAb (17B4) (FITC) (Prod. No. ALX-804-806F) or FITC coupled isotype-matched (IgG1) control MAb (used at a saturating dilution of 1/800 and 1/150 respectively) for 30 min. at 4°C in RPMI 1640 and washed twice with 1x PBS. Stained cells are then analysed by FACS [4].

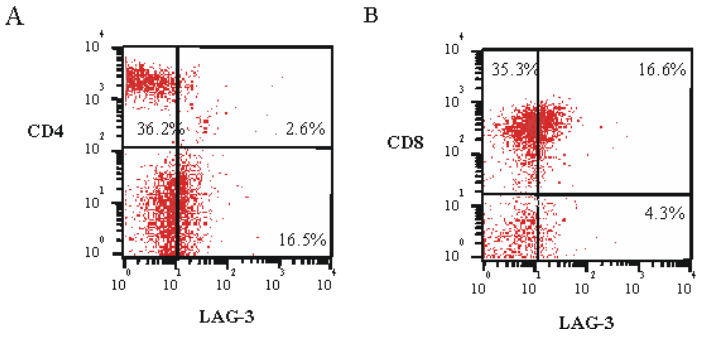

Figure: Expression of LAG-3 on $CD4^+$ and $CD8^+$ subpopulations of tumour infiltrating lymphocytes (TILs) detected with LAG-3 (human), mAb (17B4) (FITC) (Prod. No. ALX-804-806F).**Method:** TILs from a dissociated renal cell carcinoma sample, stained with 5µg/ml LAG-3 (human), mAb (17B4) (FITC) (Prod. No. ALX-804-806F) and FITC-coupled anti-CD4 or -CD8, are analyzed by a two-colour FACS analysis. Additional staining with anti-CD3 allowed a gate analysis of total T cells. Values indicate percentages in each quadrant [5].

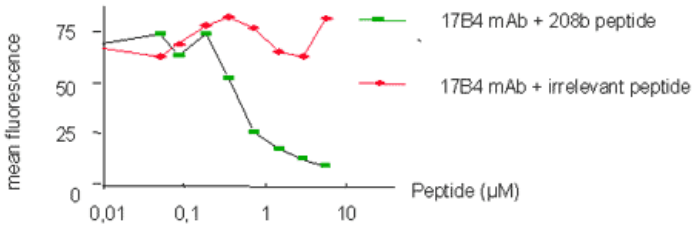

Figure: Specific inhibition of 17B4 staining.**Method:** LAG-3 (human), mAb (17B4) (FITC) (Prod. No. ALX-804-806F) (10µg/ml) (is preincubated with a specific peptide epitope (208b) or a control tetanus toxoid (TT) peptide at different molarities prior to staining of TILs. Stained cells are then analyzed by FACS.

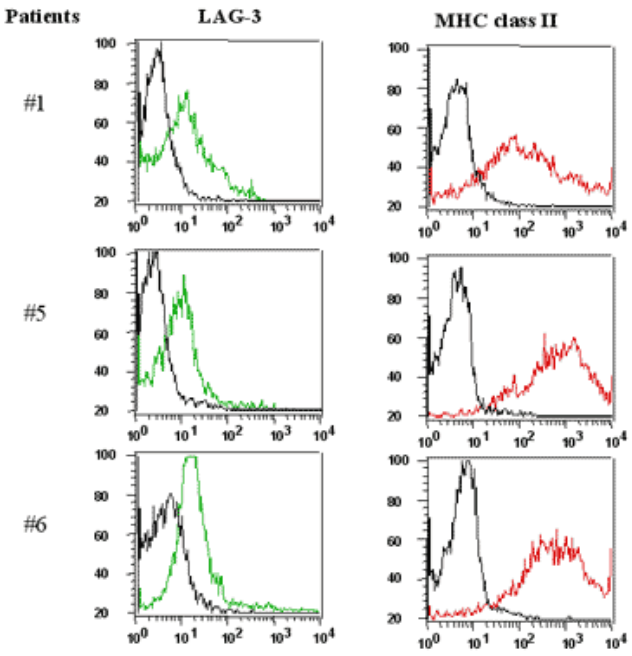

Figure: Tumor infiltrating lymphocytes (TILs) express LAG-3 (detected using LAG-3 (human), mAb (17B4) (Prod. No. ALX-804-806)). **Method:** Freshly dissociated single cell suspensions of renal cell carcinoma TILs are incubated with LAG-3 (human), mAb (17B4) (FITC) (Prod. No. ALX-804-806) (5µg/ml) and anti-MHC Class II molecules (PE) for 30 min. and washed twice in saline buffer. Additional staining with anti-CD3 allowed a gate analysis of total T cells. The LAG-3 and MHC II profiles of $CD3^+$-gated cells for 3 patients are shown [5].

Handling & Storage

Use/Stability	Stable for at least 6 months after receipt when stored as recommended.
Handling	Do not freeze. Protect from light.
Short Term Storage	+4°C
Long Term Storage	+4°C
Shipping	Blue Ice

Regulatory Status

RUO - Research Use Only

Product Details

Alternative Name	Lymphocyte activation gene-3, FDC protein, CD223
Application	Flow Cytometry
Application Notes	Excellent for Flow Cytometry.
Clone	17B4
Formulation	Liquid. In PBS containing 50mM Tris-HCl, 1% BSA and 0.02% sodium azide.
Host	Mouse
Immunogen	Synthetic peptide corresponding to 30 aa (GPPAAAPGHPLAPGPHPAAPSSWGPRPRRY) from the first N-terminal D1 domain of human LAG-3 (lymphocyte activation gene-3).
Isotype	IgG1
Purity Detail	Purified from concentrated hybridoma tissue culture supernatant by Protein A Sepharose™ CL-4B Flow Fast Column.
Source	Purified from hybridoma tissue culture supernatant.
Species Reactivity	Human

Specificity	Recognizes the 30 aa extra-loop of the first N-terminal D1 domain of LAG-3.
Technical Info / Product Notes	SEPHAROSE is a trademark of GE Healthcare companies.
UniProt ID	P18627
Worry-free Guarantee	**This antibody is covered by our Worry-Free Guarantee .**

Last modified: May 29, 2024

ENZO LIFE SCIENCES, INC.
Phone: 800.942.0430
info-usa@enzolifesciences.com

European Sales Office
ENZO LIFE SCIENCES (ELS) AG
Phone: +41 61 926 8989
info-eu@enzolifesciences.com

Belgium, The Netherlands & Luxembourg
Phone: +32 3 466 0420
info-be@enzolifesciences.com

France
Phone: +33 472 440 655
info-fr@enzolifesciences.com

Germany
Phone: +49 7621 5500 526
info-de@enzolifesciences.com

UK & Ireland
Phone (UK customers): 0845 601 1488
Phone: +44 1392 825900
info-uk@enzolifesciences.com