

## **SPECIFICATIONS**

Catalog Number	C1010
Cell Line Name	Human LAG-3-CHO-S Stable Cell Line
Accession Number	Codon optimized from NP_002277.4 (Met1-Leu525)
Host Cell	Suspension CHO
Quantity	Two vials of frozen cells $(2x10^6 \text{ per vial})$
Culture Medium	50% CD-CHO (Gibco <sup>#</sup> 10743-029), 50% Ex-Cell CHO 5 Media (Sigma <sup>#</sup> C0363), supplemented with 8mM L-Glutamine, 1xHT, 1x Penn-Strep
	and 20ug/ml puromycin
Freezing Medium	90% FBS and 10% DMSO
Storage	Liquid nitrogen

## DATA

Detection of human LAG-3 expression on human LAG-3 CHO Stable cells using a mouse monoclonal antibody specific for human LAG-3.



## BACKGROUND

Lymphocyte-activation protein 3 (LAG-3) belongs to the immunoglobulin superfamily and shares sequence homology, exon/intron organization andchromosomal localization to CD4.LAG-3 cDNA encodes a 498 amino acid transmembrane protein with 4 extracellular Ig-like domains. The expression of LAG-3 is undetectable in resting peripheral blood lymphocytes but it is induced in activated T and NK cells. Human MHC Class II molecules can bind to LAG-3 and are considered as receptors for LAG-3 on B cells and dendritic cells. LAG-3 is proven to be an inhibitory receptor on activated T cells. Crosslinking of LAG-3 on activated T cells with an anti-LAG-3 antibody inhibits T cell proliferation and cytokine secretion. Anti-LAG-3 antibodies which blocked LAG-3 binding to MHC class II molecules had strong anti-tumor activity when used in combination with anti-PD-1 antibodies in tumor xerograph models.

## References

Triebel F. et al., LAG-3, a novel lymphocyte activation gene closely related to CD4. J Exp Med. 171:1393-405. 1990.

Baixeras E. *et al.*, Characterization of the lymphocyte activation gene 3-encoded protein. A new ligand for human leukocyte antigen class II antigens. *J Exp Med.* **176**:327-37. 1992.

Hannier E., et al., CD3/TCR complex-associated lymphocyte activation gene-3 molecules inhibit CD3/TCR signaling. J Immunol. 161:4058-65. 1998.