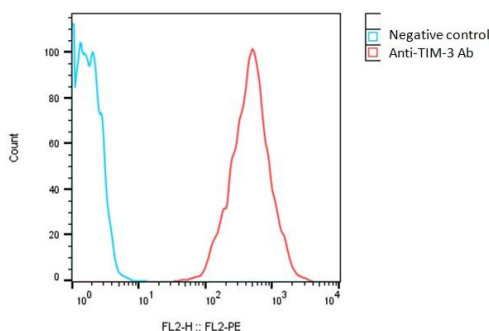


**SPECIFICATIONS**

<b>Catalog Number</b>	C3057
<b>Cell Line Name</b>	Human TIM-3-CHO-K1 stable cell line
<b>Accession Number</b>	NP_116171.3
<b>Host Cell</b>	Adherent CHO-K1
<b>Quantity</b>	Two vials of frozen cells (1x10 <sup>6</sup> per vial)
<b>Culture Medium</b>	DMEM with 10% FBS, 4µg/ml puromycin
<b>Freezing Medium</b>	90% FBS and 10% DMSO
<b>Storage</b>	Liquid nitrogen

**DATA**

Detection of human TIM-3 expression on human TIM-3-CHO-K1 stable cells using a PE-anti-human TIM-3 antibody (BioLegend, Cat. #345005).


**BACKGROUND**

T-cell immunoglobulin and mucin domain 3 (TIM-3, HAVCR2) is a type I transmembrane protein of the TIM family of proteins that functions as a critical negative regulator in the immune system, acting as a negative checkpoint in peripheral tolerance and innate immune and inflammatory responses. TIM-3 is primarily expressed on immune cells, including T cells, natural killer (NK) cells, dendritic cells, and macrophages. TIM-3 acts as a negative regulator of T cell function by inducing T cell exhaustion or apoptosis, thereby dampening excessive immune responses. It also plays a role in regulating the balance between pro-inflammatory and anti-inflammatory responses. In cancer, TIM-3 is upregulated in tumor-infiltrating lymphocytes and often co-expressed with other immune checkpoint molecules, leading to T cell exhaustion and impaired anti-tumor immune responses. TIM-3 has emerged as a promising therapeutic target for cancer immunotherapy with studies investigating the efficacy of TIM-3 blockade as a monotherapy or in combination with other immunotherapies, such as anti-PD-1/PD-L1 antibodies. Blocking TIM-3 signaling may help restore T cell function and enhance anti-tumor immune responses.

**References**

- Anderson AC. Tim-3: an emerging target in the cancer immunotherapy landscape. *Cancer Immunol Res.*2:393-398. 2014.
- Sakuishi K, et al. Targeting Tim-3 and PD-1 pathways to reverse T cell exhaustion and restore anti-tumor immunity. *J Exp Med.*207:2187-2194. 2010.
- Das M, et al. Tim-3 and its role in regulating anti-tumor immunity. *Immunol Rev.*276:97-111. 2017.

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