

## Anti-Human TIM 4 Antibody [PSH14-01] - BSA and Azide free (Detector)

# HA723590



<b>Product Type:</b>	Recombinant Rabbit monoclonal IgG, primary antibodies
<b>Species reactivity:</b>	Human
<b>Applications:</b>	ELISA(Det)
<b>Clone number:</b>	PSH14-01

**Description:** T-cell immunoglobulin and mucin domain containing 4 (TIMD-4) also known as T-cell membrane protein 4 (TIM-4) is a protein in humans that is encoded by the TIMD4 gene. TIM-4 genes are in mouse present on chromosome 11B1.1 and in humans on chromosome 5q33.2. TIM-4 contains IgV domain with integrin-binding site as well as a unique metal-ion-dependent ligand binding site for phosphatidylserine. TIM-4 also contains mucin domain with high levels of O-glycosylation. In comparison to other TIM proteins (such as TIM-1, TIM-2...) it does not contain a tyrosine-phosphorylation motif in its intracellular tail domain.

**Immunogen:** Recombinant protein within Human TIM 4 aa 25-314 (HA211014).

**Positive control:** Recombinant Human TIM 4 protein (HA211014).

**Subcellular location:** Cell membrane, Secreted, extracellular exosome.

**Database links:** SwissProt: Q96H15 Human

**Recommended Dilutions:**

**ELISA(Det)** Use at an assay dependent concentration. Can be paired for Sandwich ELISA with Rabbit monoclonal [PSH14-00] to Human TIM 4 antibody (Capture) (HA723589) and recombinant Human TIM 4 protein (HA211014) as the standard. The reference range value is 11.7-3,000 pg/mL.

**Storage Buffer:** 1\*PBS (pH7.4).

**Storage Instruction:** Store at +4°C after thawing. Aliquot store at -20°C. Avoid repeated freeze / thaw cycles.

**Purity:** Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

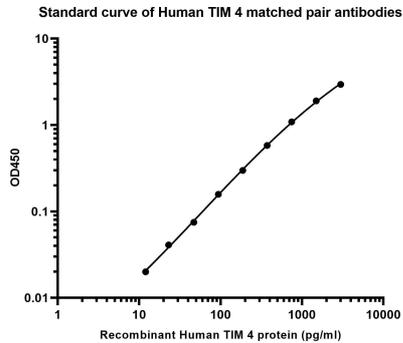
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## Images

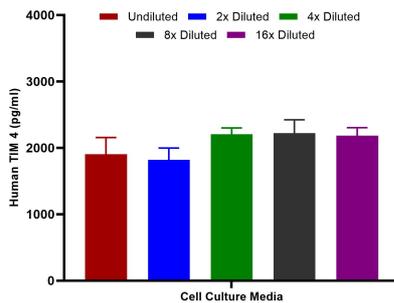
**Fig1:** Sandwich ELISA analysis of Human TIM 4 matched pair antibodies

Capture: HA723589, Human TIM 4 Rabbit mAb [PSH14-00]

Detector: HA723590, Human TIM 4 Rabbit mAb [PSH14-01]



Elisa assay was performed by coating wells of a 96-well plate with 100  $\mu$ l per well of capture antibody (HA723589) diluted in carbonate/bicarbonate buffer, at a concentration of 2ug/ml overnight at 4°C. Wells of the plate were washed, blocked with 150  $\mu$ l 0.05% tween-20 1% BSA blocking buffer, and incubated with serial diluted Recombinant Human TIM 4 protein (HA211014) protein starting from 3,000 pg/ml to 0 pg/ml and detect antibody (HA723590, Biotin, 0.2  $\mu$ g/ml) for 1 hour at 30°C with shaking. Then the plate was washed and incubated with 100  $\mu$ l per well of SA-HRP for 0.5 hour at 30°C with shaking. Detection was performed using an Ultra TMB Substrate for 10 minutes at room temperature in the dark. The reaction was stopped with sulfuric acid and absorbances were read on a spectrophotometer at 450 nm.

**Fig2:** Interpolated concentrations of spiked TIM 4 in cell culture media samples.

Capture: HA723589, Human TIM 4 Rabbit mAb [PSH14-00]

Detector: HA723590, Human TIM 4 Rabbit mAb [PSH14-01]

The concentrations of TIM 4 were measured in duplicates, interpolated from the TIM 4 standard curves and corrected for sample dilution. Undiluted samples are as follows: cell culture media 50%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2).

**Note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

## Background References

1. Chow A et al. Tim-4(+) cavity-resident macrophages impair anti-tumor CD8(+) T cell immunity. Cancer Cell. 2021 Jul
2. Wang Y et al. TIM-4 orchestrates mitochondrial homeostasis to promote lung cancer progression via ANXA2/PI3K/AKT/OPA1 axis. Cell Death Dis. 2023 Feb

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