

## Human CellExp™ Tim-3, (Fc-Tag Mouse), Mouse Recombinant

**CATALOG NO:** P1360-10 10 μg

P1360-50 50 µg

ALTERNATE NAMES: TIM3; TIMD3; Hepatitis A Virus Cellular Receptor 2; HAVcr-2; T

Cell Immunoglobulin and Mucin Domain-containing Protein 3,

HAVCR2

SOURCE: HEK 293 cells (aa 21-189)

**PURITY:**  $\geq$  98% by SDS – PAGE

**SEQUENCE:** The extracellular domain of mouse Tim-3 (aa 21-189) is fused to

the N-terminus of the Fc region of mouse IgG2a.

MOLECULAR WT.: ~65kDa

**ENDOTOXIN LEVEL:** < 5 EU/µg protein by LAL method

FORM: Lyophilized

FORMULATION: Lyophilized from 0.2 µm-filtered solution in PBS

STORAGE CONDITIONS: For long term storage, aliquot and store at -20°C. Avoid repeated

freezing and thawing cycles.

**RECONSTITUTION:** Reconstitute with 100 μl sterile water. Add 1X PBS to the desired

protein concentration.

**DESCRIPTION:** The TIM (T cell/transmembrane, immunoglobulin and mucin) family

plays a critical role in regulating immune responses, including allergy, asthma, transplant tolerance, autoimmunity and the response to viral infections. The unique structure of TIM immunoglobulin variable region domains allows highly specific recognition of phosphatidylserine (PtdSer), exposed on the surface of apoptotic cells. Tim-3, a type I transmembrane protein, contains an immunoglobulin and a mucin-like domain in its extracellular portion and a tyrosine phosphorylation motif in its cytoplasmic portion. TIM-3 is preferentially expressed on Th1 and Tc1 cells, and generates an inhibitory signal resulting in apoptosis of Th1 and Tc1 cells. TIM-3 is also expressed on some dendritic cells and can mediate phagocytosis of apoptotic cells and cross-presentation of antigen. Tim-3 functions to inhibit aggressive Th1-mediated autoand alloimmune responses. Tim-3 pathway blockade by administration of Tim-3:Fc fusion protein accelerates diabetes in nonobese diabetic mice, causes hyperproliferation of Th1 cells and Th1 cytokine release in an experimental autoimmune encephalomyelitis (EAE) model and prevents acquisition of

transplantation tolerance induced by costimulation blockade.

**BIOLOGICAL ACTIVITY:** Immobilized recombinant human Galectin-9 at 500 ng/ml can bind Tim-3 (mouse): Fc (human) (rec.) with an apparent KD <10nM.

## **RELATED PRODUCTS:**

- Human CellExp™ HAVCR1 / KIM1 / TIM1, human recombinant (Cat. No. 7494)
- TIM-4, human recombinant (Cat. No. P1108)
- Tim-1, Human Recombinant (Cat. No. P1351)
- Tim-1, Human Recombinant (Cat. No. P1352)
- Human CellExp™ Tim-1, Fc Tag, Human Recombinant (Cat. No. P1353)
- Tim-1, Mouse Recombinant (Cat. No. P1354)
- Human CellExp™ Tim-2, Fc Tag, Mouse Recombinant (Cat. No. P1355)
- Tim-2, Mouse Recombinant (Cat. No. P1356)
- Tim-3, Human Recombinant (Cat. No. P1357)
- Tim-3, Human Recombinant, (Fc-Tag Mouse) (Cat. No. P1358)
- Human CellExp<sup>™</sup> Tim-3, Mouse Recombinant (Cat. No. P1359)
- Human CellExp™ Tim-4, (Fc-Tag), Human Recombinant (Cat. No. P1361)
- Human CellExp™ Tim-4, (Fc-Tag), Mouse Recombinant (Cat. No. P1362)
- Tim-4, Mouse Recombinant (Cat. No. P1363)

FOR RESEARCH USE ONLY! Not to be used on humans.

