

Product datasheet for SR408066

OriGene Technologies, Inc.

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Havcr2 Mouse siRNA Oligo Duplex (Locus ID 171285)

Product data:

Product Type: siRNA Oligo Duplexes

Purity: HPLC purified

Quality Control: Tested by ESI-MS

Sequences: Available with shipment

Stability: One year from date of shipment when stored at -20°C.

of transfections: Approximately 330 transfections/2nmol in 24-well plate under optimized conditions (final

conc. 10 nM).

Note: Single siRNA duplex (10nmol) can be ordered.

RefSeq: <u>NM 134250</u>

UniProt ID: Q8VIM0

Synonyms: TIM-3; Tim3; Timd3

Components: Havcr2 (Mouse) - 3 unique 27mer siRNA duplexes - 2 nmol each (Locus ID 171285)

Included - SR30004, Trilencer-27 Universal Scrambled Negative Control siRNA Duplex - 2 nmol

Included - SR30005, RNAse free siRNA Duplex Resuspension Buffer - 2 ml



Summary:

Cell surface receptor implicated in modulating innate and adaptive immune responses. Generally accepted to have an inhibiting function. Reports on stimulating functions suggest that the activity may be influenced by the cellular context and/or the respective ligand (PubMed:18006747). Regulates macrophage activation (PubMed:11823861). Inhibits T-helper type 1 lymphocyte (Th1)-mediated auto- and alloimmune responses and promotes immunological tolerance (PubMed:14556006, PubMed:18006747). In CD8+ cells attenuates TCR-induced signaling, specifically by blocking NF-kappaB and NFAT promoter activities resulting in the loss of IL-2 secretion. The function may implicate its association with LCK proposed to impair phosphorylation of TCR subunits (By similarity). In contrast, shown to activate TCR-induced signaling in T-cells probably implicating ZAP70, LCP2, LCK and FYN (PubMed:21807895). Expressed on Treg cells can inhibit Th17 cell responses (By similarity). Receptor for LGALS9. Binding to LGALS9 is believed to result in suppression of T-cell responses; the resulting apoptosis of antigen-specific cells may implicate HAVCR2 phosphorylation and disruption of its association with BAG6 (PubMed:22863785). Binding to LGALS9 is proposed to be involved in innate immune response to intracellular pathogens. Expressed on Th1 cells interacts with LGALS9 expressed on Mycobacterium tuberculosisinfected macrophages to stimulate antibactericidal activity including IL-1 beta secretion and to restrict intracellular bacterial growth (PubMed:20937702). However, the function as receptor for LGALS9 has been challenged (By similarity). Also reported to enhance CD8+ T-cell responses to an acute infection such as by Listeria monocytogenes (PubMed:24567532). Receptor for phosphatidylserine (PtSer); PtSer-binding is calcium-dependent (PubMed:20083673). May recognize PtSer on apoptotic cells leading to their phagocytosis. Mediates the engulfment of apoptotic cells by dendritic cells (PubMed:19224762). Expressed on T-cells, promotes conjugation but not engulfment of apoptotic cells (PubMed:20083673). Expressed on dendritic cells (DCs) positively regulates innate immune response and in synergy with Toll-like receptors promotes secretion of TNF-alpha (PubMed:18006747). In tumor-imfiltrating DCs suppresses nucleic acid-mediated innate immune repsonse by interaction with HMGB1 and interfering with nucleic acid-sensing and trafficking of nucleid acids to endosomes (PubMed:22842346). Can enhance mast cell production of Th2 cytokines Il-4, IL-6 and IL-13 (PubMed:17620455). Expressed on natural killer (NK) cells acts as a coreceptor to enhance IFN-gamma production in response to LGALS9. In contrast, shown to suppress NK cell-mediated cytotoxicity (By similarity). Negatively regulates NK cell function in LPS-induced endotoxic shock (PubMed:25337993).[UniProtKB/Swiss-Prot Function]





Performance Guaranteed:

OriGene guarantees that at least two of the three Dicer-Substrate duplexes in the kit will provide at least 70% or more knockdown of the target mRNA when used at 10 nM concentration by quantitative RT-PCR when the TYE-563 fluorescent transfection control duplex (cat# SR30002) indicates that >90% of the cells have been transfected and the HPRT positive control (cat# SR30003) provides 90% knockdown efficiency.

For non-conforming siRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the siRNA kit. To arrange for a free replacement with newly designed duplexes, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled siRNA control (quantitative RT-PCR data required).