

## Recombinant Human SIGIRR/TIR8 Protein (His Tag)

**Catalog Number:** PKSH030883

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

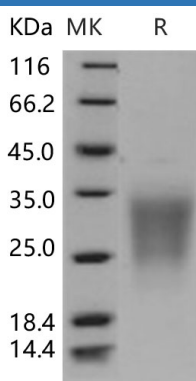
### Description

<b>Species</b>	Human
<b>Source</b>	HEK293 Cells-derived Human SIGIRR/TIR8 protein Met 1-His 118, with an C-terminal His
<b>Calculated MW</b>	14 kDa
<b>Observed MW</b>	25-35 kDa
<b>Accession</b>	Q6IA17-1
<b>Bio-activity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from sterile PBS, pH 7.4 Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 95 % as determined by reducing SDS-PAGE.

### Background

### For Research Use Only

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Single Ig IL-1-related receptor (SIGIRR) or TIR8 is a member of Toll-like receptor-interleukin 1 receptor signaling (TLR-IL-1R) receptor superfamily. Although SIGIRR/TIR8 shows the typical conserved motifs that characterize the IL-1R and Toll superfamily; it is structurally and functionally distinct from both. SIGIRR/TIR8 has only one Ig domain in its extracellular portion whereas the IL-1R family contains three Ig folds. An unusually long cytoplasmic domain is reminiscent of the structure of drosophila Toll; yet the SIGIRR peptide sequence is more closely related to IL-1RI. SIGIRR/TIR8 was mainly expressed in mouse and human epithelial tissues such as kidney; lung and gut. Resting and activated T and B lymphocytes and monocytes-macrophages expressed little or no SIGIRR/TIR8; with the exception of the mouse GG2EE macrophage line. Inflammation is enhanced in SIGIRR-deficient mice. SIGIRR negatively modulates immune responses. Inflammation is enhanced in SIGIRR-deficient mice; as shown by their enhanced chemokine induction after IL-1 injection and reduced threshold for lethal endotoxin challenge.