



**LD Biopharma, Inc.**  
9924 Mesa Rim Road Suite B  
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<http://www.ldbiopharma.com>

## - PRODUCT DATA SHEET -

**Name of Product:** Recombinant Human CD357 Protein  
**Catalog Number:** hRP-1627  
**Manufacturer:** LD Biopharma, Inc.

### Introduction

Human tumor necrosis factor receptor superfamily member 18 (TNFRSF18, also named as CD357) is a receptor for TNFSF18. CD357 protein has been shown to have increased expression upon T-cell activation, and it is thought to play a key role in dominant immunological self-tolerance maintained by CD25<sup>+</sup> / CD4<sup>+</sup> regulatory T cells. CD357 Knockout studies in mice also suggest the role of this receptor is in the regulation of CD3-driven T-cell activation and programmed cell death. It also mediated NF-kappa-B activation via the TRAF2/NIK pathway.

Full-length extracellular domain of human CD357 extracellular domain cDNA (26-162 aa) was constructed by gene synthesis with codon optimization and expressed with a small T7-His-TEV cleavage site Tag (29aa) fusion at its N-terminal. This protein is expressed in E.coli as inclusion bodies. The final product was refolded using our unique “temperature shift inclusion body refolding” technology and chromatographically purified.

**Gene Symbol:** CD357 (TNFRSF18, AITR; GITR; GITR-D)  
**Accession Number:** NP\_004186  
**Species:** Human  
**Size:** 50 µg / Vial  
**Composition:** 0.5 mg/ml, sterile-filtered, in 20 mM pH 8.0 Tris-HCl Buffer, with proprietary formulation of NaCl, KCl, EDTA, DTT and Glycerol.  
**Storage:** In Liquid. Keep at -80°C for long term storage. Product is stable at 4 °C for at least 30 days.

### Key References

Xufre C, et al., *Low frequency of GITR+ T cells in ex vivo and in vitro expanded Treg cells from type 1 diabetic patients.* Int. Immunol. 25 (10), 563-574 (2013)

Liu Y, et al., *Novel tumor suppressor function of glucocorticoid-induced TNF receptor GITR in multiple myeloma.* PLoS ONE 8 (6), E66982 (2013)



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Arandi N, et al., *Frequency and expression of inhibitory markers of CD4(+) CD25(+) FOXP3(+) regulatory T cells in patients with common variable immunodeficiency*. Scand. J. Immunol. 77 (5), 405-412 (2013)

## **Applications**

1. May be used for in vitro CD357 mediated T cell activation regulation study with this protein as either coating matrix protein or soluble factor.
2. May be used for CD357 protein-protein interaction assay.
3. Potential biomarker protein for clinical monitoring T cell function in vitro.
4. As antigen for specific antibody production.

## **Quality Control**

Purity: > 90% by SDS-PAGE.

## **Recombinant Protein Sequence**

MASMTGGQQMGRGHHHHHGNLYFQGEFQRPTGGPGCGPGRLLLLGTGTDARCCRVHTTRCCRDY  
PGEECCSEWDCMCVQPEFHCGDPCCTTCRHHPCPPGQGVQSQGF SFGFQCIDCASGTFSGGHE  
GHCKPWT DCTQFGFLTVFPGNKTHNAVCPGSPPAEP