



**LD Biopharma, Inc.**  
7384 Trade Street, Suite B  
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## - PRODUCT DATA SHEET -

**Name of Product:** Recombinant Human **CD215** Protein  
**Catalog Number:** HRP-2351  
**Manufacturer:** LD Biopharma, Inc. USA

### Introduction

Human CD215 gene encodes a high-affinity receptor for interleukin-15 (also named as IL15RA). It can signal both in *cis* and *trans* where IL15R from one subset of cells presents IL15 to neighboring IL2RG-expressing cells. In neutrophils, CD215 binds and activates kinase SYK in response to IL15 stimulation. In neutrophils, it is required for IL15-induced phagocytosis in a SYK-dependent manner. Expression of different isoforms (at least 8 isoforms) of CD215 may alter or interfere with signal transduction.

Full-length extracellular domain of human CD215 cDNA (31 – 205aa, Isoform-I, derived from BC121140) was constructed with codon optimization gene synthesis and expressed with a human alpha Fetal Protein N-terminal (AFPn) -His-TEV cleavage site Tag (217aa) fusion at its N-terminal in E.coli as inclusion bodies. The final product was refolded using our unique “temperature shift inclusion body refolding” technology and chromatographically purified.

<b>Gene Symbol:</b>	CD215	( IL15RA )
<b>Accession Number:</b>	NP_002180	
<b>Species:</b>	Human	
<b>Size:</b>	50 µg / Vial	
<b>Composition:</b>	0.5 mg/ml, sterile-filtered, in 20 mM pH 8.0 Tris-HCl Buffer, with proprietary formulation of NaCl, KCl, EDTA, Sucrose, DTT and others.	
<b>Storage:</b>	In Liquid. Keep at -80°C for long term storage. Product is stable at 4 °C for at least two weeks.	

### Key References

Finch DK, et al., *Lung Dendritic Cells Drive Natural Killer Cytotoxicity in Chronic Obstructive Pulmonary Disease via IL-15Ralpha*. Am. J. Respir. Crit. Care Med. 198 (9), 1140-1150 (2018)



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Kowalsky SJ, et al., **Superagonist IL-15-Armed Oncolytic Virus Elicits Potent Antitumor Immunity and Therapy That Are Enhanced with PD-1 Blockade.** Mol. Ther. 26 (10), 2476-2486 (2018)

Balint S, et al., **A nanoscale reorganization of the IL-15 receptor is triggered by NKG2D in a ligand-dependent manner.** Sci Signal 11 (525) (2018)

## Applications

1. May be used for in vitro CD215 mediated NK cell activities regulation study using this recombinant CD215 protein either as soluble factor or as coating matrix protein.
2. May be used for CD215 protein-protein interaction assay.
3. Potential Therapeutic / diagnostic protein, which may be used as NK cell activities modulator (such as anti-CD215 antibody) for various immune-therapy applications.
4. As native human CD215 immunogen for specific antibody production.

## Quality Control

Purity: > 90% by SDS-PAGE.

## Recombinant Human **AFPn**- CD215 Fusion Protein Sequence ( 43.1 kD )

MTLHRNEYGIASILDSYQCTAEISLADLATIFFAQFVQEATYKEVSKMVKDALTAIEKPTGDEQ  
SSGCLLENQLPAFLEELCHEKEILEKYGHSDCCSQSEEGRHNCFLAHKKPTPASIPLFQVPEPVT  
SCEAYEEDRETFMNFYIYEIARRHPFLYAPTILLWAARYDKIIPSCCKAENAVECFQTKAATVT  
KELRESSGSHHHHGHSENLYFQGEITCPPPMSVEHADIWVKSYSLSRERYICNSGFKRKA  
GTSSLTECVLNKATNVAHWTTPSLKCIRDPAVHQRPAAPPSTVTTAGVTPQPESLSPSGKEPAA  
SSPSSNNTAATTAIVPGSQLMPSKSPSTGTTEISSHESHGTPSQTTAKNWELTASASHQPPG  
VYPQGHSDTT