

**Datasheet for 012-001-V56-0005****rRat IL-17AF Heterodimer Protein****Overview**

|                      |                                                                         |
|----------------------|-------------------------------------------------------------------------|
| <b>Description:</b>  | Rat Interleukin-17AF Heterodimer Recombinant Protein - 012-001-V56-0005 |
| <b>Item No.:</b>     | 012-001-V56-0005                                                        |
| <b>Size:</b>         | 5 µg                                                                    |
| <b>Applications:</b> | SDS-PAGE, Cellular Assay                                                |
| <b>Origin:</b>       | Rat                                                                     |
| <b>Expressed in:</b> | E. coli                                                                 |

**Product Details**

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Background:</b>        | Interleukin-17AF (IL-17AF) is a member of the IL-17 family of proteins produced by a subset of T cells, called Th17, following stimulation with IL-23. Since IL-17AF is thought to signal through the IL-17RA receptor, its biological function is similar to that of IL-17A in that it induces the production of a variety of chemokines, in addition to airway neutrophilia. In regard to these functions, IL-17AF has less activity than the IL-17A homodimer but, greater activity than the IL-17F homodimer. Human and rat IL-17AF both show activity on mouse cells. Recombinant rat IL-17AF is a non-glycosylated, disulfide-linked heterodimer, containing one IL-17A subunit and one IL-17F subunit. The dimer has a total of 269 amino acids, with total molecular weight of 30.7 kDa. |
| <b>Synonyms:</b>          | IL17 heterodimer, IL17AF heterodimer, CTLA-8 ML-1 dimer, Interleukin 17AF, Interleukin-17AF heterodimer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Species of Origin:</b> | Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Expressed in:</b>      | E. coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Type:</b>              | Recombinant Protein                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Low Endotoxin:</b>     | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

**Target Details**

|                            |                                                                                                                                                                                   |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name:</b>          | Il17a/Il17f                                                                                                                                                                       |
| <b>Purity/Specificity:</b> | Interleukin-17AF Heterodimer purity was determined to be greater than 98% as determined by HPLC, analysis by UV-Spectroscopy at 280nm, and by reducing and non-reducing SDS-PAGE. |

Relevant Links: • [UniProtKB - Q61453](#)

## Application Details

|                                |                                                                                                                                                                                                                                                                       |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Tested Applications:</b>    | SDS-PAGE                                                                                                                                                                                                                                                              |
| <b>Suggested Applications:</b> | Cellular Assay (Based on references)                                                                                                                                                                                                                                  |
| <b>Application Note:</b>       | Interleukin-17AF Heterodimer Recombinant Protein has been tested by SDS-PAGE and biological activity and is suitable as a control for polyclonal or monoclonal anti-Interleukin-17AF Heterodimer in immunological assays.                                             |
| <b>Assay Dilutions:</b>        | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.                                                                                                                                                                       |
| <b>Other:</b>                  | Endotoxin Level: Measured by kinetic LAL analysis and is typically $\leq 1$ EU/ $\mu$ g protein. Biologic Activity: The activity is determined by the dose-dependent induction of IL-6 production in cultured mouse NIH 3T3 fibroblasts and is typically 20-30 ng/mL. |

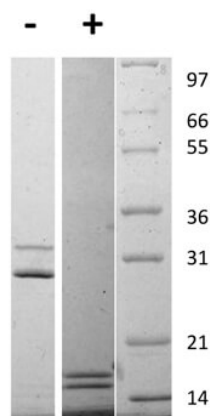
## Formulation

|                               |                                              |
|-------------------------------|----------------------------------------------|
| <b>Physical State:</b>        | Lyophilized                                  |
| <b>Buffer:</b>                | 0.1% Trifluoroacetic acid                    |
| <b>Preservative:</b>          | None                                         |
| <b>Stabilizer:</b>            | None                                         |
| <b>Reconstitution Volume:</b> | 5 $\mu$ l (5-50 $\mu$ l)                     |
| <b>Reconstitution Buffer:</b> | Restore with deionized water (or equivalent) |

## Shipping & Handling

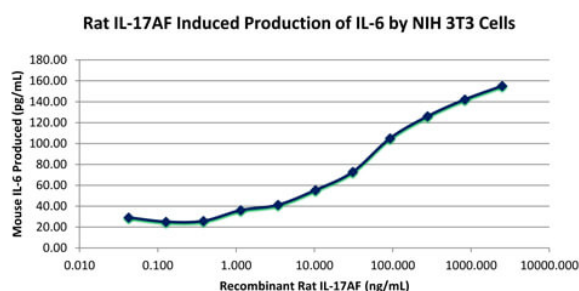
|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Shipping Condition:</b> | Ambient                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Storage Condition:</b>  | Store vial at 4° C prior to restoration. Dilute only prior to immediate use. Maintain sterility. This product DOES NOT contain preservative. DO NOT VORTEX. We recommend adding a carrier protein such as HSA or BSA to 0.1% (i.e. 1.0 mg/mL). For best results aliquot contents and freeze at -20° C or colder. Avoid cycles of freezing and thawing. Centrifuge vial before each opening to dislodge contents from the cap and to clarify if contents are not clear after standing at room temperature. |
| <b>Expiration:</b>         | Expiration date is six (6) months from date of receipt.                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

## Images



### SDS-PAGE

SDS-PAGE of Rat Interleukin-17 Animal Free Recombinant Protein. Lane 1: 1  $\mu$ g Rat IL-17 AF in non-reducing conditions (-). Lane 2: 1  $\mu$ g Rat IL-17 AF in reducing conditions (+). Lane 3: Molecular weight marker. Rat IL-17AF is a heterodimer with a predicted total MW of 30.7 kDa.



### SDS-PAGE

Bioactivity of Rat Interleukin-17 AF Heterodimer Recombinant Protein. Serial dilutions of Rat IL-17 AF (starting at 2.5  $\mu$ g/mL) were added to NIH 3T3 cells. After 48 hours, production of mouse IL-6 was measured and the linear portion of the curve was used to calculate the ED50. The ED50 of Rat IL-17 AF is between 15.3-23 ng/mL. There is no typical range for Rat IL-17AF.

## Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.