

# Datasheet: OBT1546A

**BATCH NUMBER 163784**

|                      |                                           |
|----------------------|-------------------------------------------|
| <b>Description:</b>  | RECOMBINANT HUMAN INTERFERON BETA 1 ALPHA |
| <b>Name:</b>         | IFN BETA 1A                               |
| <b>Other names:</b>  | INTERFERON BETA                           |
| <b>Format:</b>       | Rec. Protein                              |
| <b>Product Type:</b> | Recombinant Protein                       |
| <b>Quantity:</b>     | 5 µg                                      |

## Product Details

### Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

|                   | Yes | No | Not Determined | Suggested Dilution |
|-------------------|-----|----|----------------|--------------------|
| Functional Assays | ■   |    |                |                    |

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

|                                       |                                                                                                                                                                                                                              |
|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Target Species</b>                 | Human                                                                                                                                                                                                                        |
| <b>Product Form</b>                   | Recombinant protein - lyophilized                                                                                                                                                                                            |
| <b>Reconstitution</b>                 | Reconstitute with 50ul of distilled water<br>Care should be taken during reconstitution as the protein may appear as a film at the bottom of the vial. Bio-Rad recommend that the vial is gently mixed after reconstitution. |
| <b>Preservative Stabilisers</b>       | 0.34M Mannitol<br>0.9% human serum albumin                                                                                                                                                                                   |
| <b>Approx. Protein Concentrations</b> | Total protein concentration 0.1 mg/ml after reconstitution                                                                                                                                                                   |
| <b>External Database Links</b>        | <b>UniProt:</b><br><a href="#">P01574</a> <a href="#">Related reagents</a><br><br><b>Entrez Gene:</b>                                                                                                                        |

|                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Synonyms</b>                      | IFB, IFNB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Product Information</b>           | <p><b>Recombinant human interferon beta 1a</b> is a CHO cell derived recombinant protein corresponding to single, glycosylated polypeptide chain containing 166 amino acid residues. Interferon beta 1a is a 22 kDa cytokine and member of the type 1 interferon family.</p> <p>Interferons exhibit anti-viral and anti proliferative effects and also influence the immune response. Effects on the immune system mediated by interferons may be mediated by increased expression of major histocompatibility complex (MHC) antigens. Interferon beta a has been shown to exhibit therapeutic efficacy against viral infections, different types of cancer and multiple sclerosis (<a href="#">Borden <i>et al.</i> 2007</a>).</p> |
| <b>Activity</b>                      | 270 x 10 <sup>6</sup> IU/mg, as determined in a viral resistance assay                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Purity</b>                        | >98.0% as determined by HPLC and SDS-PAGE.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>References</b>                    | 1. Smith, M.C. <i>et al.</i> (2013) hTERT extends the life of human fibroblasts without compromising type I interferon signaling. <a href="#">PLoS One. 8 (3): e58233.</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Further Reading</b>               | 1. Borden, E.C. <i>et al.</i> (2007) Interferons at age 50: past, current and future impact on biomedicine <a href="#">Nat Rev Drug Discov. 6: 975-90</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Storage</b>                       | <p>Prior to reconstitution store at +4°C.</p> <p>After reconstitution store at -20°C.</p> <p>Storage in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the protein. Should this product contain a precipitate we recommend microcentrifugation before use.</p>                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Guarantee</b>                     | 12 months from date of despatch                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Health And Safety Information</b> | Material Safety Datasheet documentation #10493 available at: <a href="https://www.bio-rad-antibodies.com/SDS/OBT1546A">https://www.bio-rad-antibodies.com/SDS/OBT1546A</a> 10493                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Regulatory</b>                    | For research purposes only                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)

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