# Recombinant Human 4-BBL (TNFSF9)

**Cat No:HR2R1116**

For research use only

## Overview

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|---|---|
| Quantity | 1.0 ?g |
| Gene Symbol | TNFSF9 |
| Gene ID | 8744 |
| Accession | P41273 |
| Alternative Name | TNFSF9, CD137L, 4BBL |
| Species | Human |
| Source | E. coli |
| Description | Human 4-BBL or TNFSF9 is a member of the TNF superfamily. It is a type 2 transmembrane protein expressed on activated T-cells. It is a bidirectional signal transducer which acts as a costimulatory receptor molecule on T lymphocytes. Its functions primarily stimulate the immune response by promoting the release of cytokines such as IL-2 and IFN-gamma. TNFSF9 works with TNFRSF9 for the generation of cytotoxic T cells, proliferation of T-cells as well as antigen presentation. It also reactivates T lymphocytes which have become anergic. It is also expressed on activated NK cells, B-cells, macrophages, dendritic cells and some brain cells. Recombinant Human 4-BBL is a 19.6 kDa protein. |
| Functions | coming soon |
| Formulation | coming soon |
| Solubility | N/A |
| Appearance | Lyophilized Powder |
| Molecular Weight | 19.6 |
| Purity | >95% as determined by SDS-PAGE |
| Concentration | <1.0 EU/?g of recombinant protein as determined by the LAL method. |
| Shipping Condition | Ambient Temperature |
| Storage Condition | The lyophilized protein is stable for at least one year from date of receipt at -70?C. Upon reconstitution, this cytokine can be stored in working aliquots at 2? - 8?C for one month, or at -20?C for six months, with a carrier protein without detectable loss of activity. Avoid repeated freeze/thaw cycles. |