9051 Mira Mesa Blvd, #910094
San Diego, CA 92191
Tel: 760-390-3989

BAFFR Human, HEK

BAFF (BLyS) Receptor Human Recombinant, HEK
CYK0066

Product Overview

Name	BAFFR Human, HEK
Description	
BAFF (BLyS) Receptor Human Recombinant, HEK	
Accession (Primary)	Q96RJ3
Synonyms	
TNFRSF13C, CD268, BAFF-R, MGC138235, B cell-activating factor receptor.	
Source	
HEK293 Cells.	
Physical Appearance	
Sterile Filtered colorless solution.	
Formulation	
The BAFFR solution (1mg/ml) contains 10% Glycerol and Phosphate-Buffered Saline (pH 7.4).	
Stability	
Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.	
Purity	
Greater than 95.0% as determined by SDS-PAGE.	
Amino acid sequence	
DGSMRRGPRS LRGRDAPAPT PCVPAECFDL LVRHCVACGL LRTPRPKPAG ASSPAPRTAL QPQESVGAGA GEAALPLPGL L LEPKSCDKT HTCPPCPAPE LLGGPSVFLF PPKPKDTLMI SRTPEVTCVV VDVSHEDPEV KFNWYVDGVE VHNAKTKPRE EQYNSTYRVV SVLTVLHQDW LNGKEYKCKV SNKALPAPIE KTISKAKGQP REPQVYTLPP SRDELTKNQV SLTCLVKGFY PSDIAVEWES NGQPENNYKT TPPVLDSDGS FFLYSKLTVD KSRWQQGNVF SCSVMHEALH NHYTQKSLSL SPGK.	
Biological Activity	
The ED50 is ≤0.7 ug/ml, measured by its ability in a functional ELISA with BAFF Human.	
Background	
B-cell Activating Factor (BAFF) and its corresponding receptor, BAFF-R, are integral components of the immune system, orchestrating crucial processes in B-cell survival, maturation, and differentiation. As we delve into the intricate	

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world of immunology, the study of BAFF and its receptor has unveiled essential pathways that govern the immune responses in health and disease. This research investigates the multifaceted role of BAFF Receptor Protein, shedding light on its structural complexities, signaling mechanisms, and its pivotal contributions to immune regulation. By exploring the interactions between BAFF and its receptor, scientists aim to decipher the delicate balance that underlies immune homeostasis and explore potential therapeutic avenues. Structural Architecture of BAFF Receptor Protein: BAFF Receptor, a transmembrane protein predominantly expressed on B cells, belongs to the tumor necrosis factor receptor (TNFR) superfamily. Its intricate structure involves various domains, each playing a unique role in ligand binding, receptor activation, and downstream signaling. Understanding the structural intricacies of BAFF Receptor is paramount to unraveling the molecular events that govern B-cell fate decisions and immune responses. Physiological Significance in B-Cell Biology: BAFF Receptor, upon binding with its ligand BAFF, initiates a cascade of events critical for B-cell survival and function. This interaction promotes B-cell maturation, prevents premature apoptosis, and influences the formation of immune synapses. Additionally, BAFF Receptor signaling is tightly regulated to prevent excessive B-cell activation, ensuring immune tolerance and preventing autoimmune responses. Disruptions in these pathways can lead to autoimmune disorders, underscoring the crucial role of BAFF Receptor in maintaining immune equilibrium. Regulation of Immune Responses: BAFF Receptor signaling not only affects B-cell development but also has broader implications for immune responses. By modulating antibody production, B-cell activation, and immune memory, BAFF Receptor plays a vital role in shaping adaptive immunity. Its dysregulation has been implicated in various autoimmune conditions, making it an attractive target for therapeutic interventions aimed at restoring immune balance. BAFF Receptor as a Therapeutic Target: The intricate involvement of BAFF Receptor in autoimmune diseases, such as rheumatoid arthritis and systemic lupus erythematosus, has positioned it as a promising therapeutic target. Researchers are exploring monoclonal antibodies and other targeted therapies that aim to modulate BAFF Receptor signaling, providing a new frontier in autoimmune disease management. Additionally, understanding the BAFF-BAFF Receptor axis offers potential insights into the development of vaccines and immunotherapies, fostering innovative approaches in the fight against infectious diseases and malignancies. BAFF Receptor Protein, as a key player in immune regulation, embodies the complexities of immunology. Its interactions with BAFF orchestrate fundamental processes in B-cell biology and adaptive immunity. As scientists unravel the intricate signaling pathways and structural nuances of BAFF Receptor, they pave the way for novel therapeutic strategies and innovative treatments for autoimmune disorders and beyond. This research not only deepens our understanding of immune regulation but also holds the promise of transformative advancements in immunotherapy, ultimately shaping the future of immune-related healthcare.

Precautions

BAFFR Human, HEK is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (Q96RJ3)

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Background

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