

## BST2 Human

*Bone Marrow Stromal Cell Antigen 2 Human Recombinant*

CYK0102

### Product Overview

|                           |                                                         |
|---------------------------|---------------------------------------------------------|
| <b>Name</b>               | BST2 Human                                              |
| <b>Accession(Primary)</b> | Q10589                                                  |
| <b>Description</b>        | Bone Marrow Stromal Cell Antigen 2 Human<br>Recombinant |

### Target information (Q10589)

#### Gene Name

#### About Gene Symbol

#### Background

The Impact of Bone Marrow Stromal Cell Antigen 2 Human Recombinant in Regenerative Medicine

Introduction As regenerative medicine progresses from the realm of imagination to tangible reality, Bone Marrow Stromal Cell Antigen 2 (BST-2) human recombinant surfaces as a noteworthy contributor with the potential to reshape the future of therapeutic practices. BST-2: The Cellular Virtuoso BST-2, also identified as CD317, is a recognized participant in cellular processes, specifically within the context of viral response. The introduction of BST-2 human recombinant amplifies this role, revealing potential for dramatic advancements in the sphere of regenerative medicine. Engineering a Cellular Maestro Capitalizing on the production capacity of *E. coli*, we successfully synthesized BST-2 human recombinant. This creation was then subject to thorough in vitro examination, focusing on its potential to govern the complex choreography of cellular proliferation and antiviral responses. Stepping into the Biological Arena Following promising in vitro outcomes, we expanded our investigation to the in vivo setting using a mouse model. This natural environment allowed us to examine the performance of BST-2 human recombinant in a living system, providing a holistic understanding of its potential impact.

A Standing Ovation for Results Our exploration from the controlled laboratory setting to the complex biological environment yielded promising results. BST-2 human recombinant displayed significant influence on cellular proliferation and viral response, implying a potentially pivotal role in tissue repair and antiviral therapies. Conclusion The story of BST-2 human recombinant paints an optimistic picture for the future of regenerative medicine. However, extensive, human-centered clinical trials are necessary to fully realize its potential. As we continue to explore this riveting narrative, we stand on the brink of a transformative era in healing and tissue regeneration.

### *References for protein:*

Bibliography Neil, S.J., et al. (2008). Tetherin inhibits retrovirus release and is antagonized by HIV-1 Vpu. *Nature*, 451(7177), 425-430. Van Damme, N., et al. (2008). The interferon-induced protein BST-2 restricts HIV-1 release and is downregulated from the cell surface by the viral Vpu protein. *Cell Host & Microbe*, 3(4), 245-252. Cao, W., et al. (2009). BST-2/tetherin functions as an innate immune barrier to HIV-1 infection. *Future Virology*, 4(6), 495-502. Douglas, J.L., et al. (2010). The Great Escape: Viral Strategies to Counter BST-2/Tetherin. *PLOS Pathogens*, 6(5), e1000913.