10 μg



## Human NRG1-β1 Recombinant Protein



Orders:

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3 Trask Lane | Danvers | Massachusetts | 01923 | USA

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<b>MW (kDa):</b> 7.6	<b>UniProt ID:</b> #Q02297	Entrez-Gene Id: 3084
Background		Neuregulin 1 (NRG1), a member of the EGF family, is involved in heart, mammary, and nervous system development (1). NRG1 is expressed by mammary epithelial, vascular endothelial, and neuronal cells (2,3). At least 15 NRG1 splice variants are known (1). These variants differ in EGF domains ( $\alpha$ or $\beta$ variants), amino-terminal splicing sites, and in the incorporation of exons encoding integral membrane regions (1). NRG1 can induce or inhibit the proliferation of cells derived from breast cancer. The differences in effects of NRG1 appear to depend on splice variation and interaction with receptor(s) (2). NRG1 binds to ErbB3/HER3 or ErbB4/HER4. Binding induces dimerization with ErbB2/HER2. The Akt, Erk1/2, and Erk5 pathways have been shown to participate in NRG1 activated signaling (4,5). NRG1 appears to have roles in schizophrenia and breast cancer (1,4,6).
Endotoxin		Endotoxin levels are less than or equal to 1 EU / 1 $\mu g$ hNRG1- $\beta$ 1.
Purity		A greater than or equal to 95% purity was determined by SDS-PAGE.
Source / Purifica	ation	Recombinant human NRG1-β1 was expressed in <i>E. coli</i> and is supplied in a lyophilized form.
Background Re	ferences	<ol> <li>Falls, D.L. (2003) Exp Cell Res 284, 14-30.</li> <li>Chua, Y.L. et al. (2009) Oncogene 28, 4041-52.</li> <li>Kalinowski, A. et al. (2010) FASEB J 24, 2567-75.</li> <li>Montero, J.C. et al. (2008) Clin Cancer Res 14, 3237-41.</li> <li>Grossmann, K.S. et al. (2009) Proc Natl Acad Sci U S A 106, 16704-9.</li> <li>Mei, L. and Xiong, W.C. (2008) Nat Rev Neurosci 9, 437-52.</li> </ol>

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