



Product Information

Estrogen Receptor- β Human, Recombinant

Product Number **E 1653**
Storage Temperature $-70\text{ }^{\circ}\text{C}$

Product Description

Human estrogen receptor- β is expressed in insect cells by recombinant baculovirus having post-translational modifications similar to those found in mammalian cells.

Estrogen receptor- β is a hormone-inducible transcription factor that can act positively or negatively in regulating genes involved in tissue growth and differentiation. It shares a high homology with Estrogen receptor- α , but is found in very different tissues such as cardiovascular, the central nervous system, and the immune system.¹ Like ER- α , ER- β is stimulated by 17β -estradiol² and is responsive to selective estrogen receptor modulators (SERMs), although with different affinities than ER- α .³ Estrogen receptor- β has been shown to induce the Erg-1 promoter via the SREs in cardiomyocytes.⁴ Glyceollins have been shown to exhibit a unique antagonistic effect on the receptor in both HEK 293 and MCF-7 cells.⁵

The product is supplied as 750 pmoles in 50 mM Bis-tris-propane, pH 9.0, containing 400 mM KCl, 2 mM DTT, 1 mM EDTA, and 10% glycerol.

Purity: >80% (SDS-PAGE)

Precautions and Disclaimer

This product is for laboratory use only. Please consult the Material Data Safety Sheet for information regarding hazards and safe handling practices.

Storage/Stability

The product ships on dry ice and it is recommended to store the product at $-70\text{ }^{\circ}\text{C}$. Thaw in room temperature water bath and keep on ice during use. Do not vortex. Aliquots may be stored at $-70\text{ }^{\circ}\text{C}$ without additional storage buffer. Avoid repeated freeze-thaw cycles.

References

1. Gustafsson, J.A., Novel aspects of estrogen action. *J. Soc. Gynecol. Investig.*, **7**, S8-9 (2000).
2. Dechering, K., et al., Estrogen receptors alpha and beta: two receptors of a kind? *Curr. Med. Chem.*, **7**, 561-576 (2000).
3. Katzenellenbogen, B.S. and Katzenellenbogen J.A., Estrogen receptor transcription and transactivation: Estrogen receptor alpha and estrogen receptor beta: regulation by selective estrogen receptor modulators and importance in breast cancer. *Breast Cancer Res.*, **2**, 335-344 (2000).
4. de Jager, T., et al., Mechanisms of estrogen receptor action in the myocardium. *J. Biol. Chem.*, **276**, 27873-27880 (2001).
5. Burow, M. E., et al., Phytochemical glyceollins, isolated from soy, mediate antihormonal effects through estrogen receptor alpha and beta. *J. Clin. Endocrinol. Metab.*, **86**, 1750-1758 (2001).

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