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# ProductInformation

**Estrogen Receptor-b 1, Long Form**
**Human, Recombinant**

Product Number **E 1403**
Storage Temperature –70 °C

## Product Description

Human estrogen receptor-β 1, long form, is a 59.2 kDa protein expressed in insect cells by recombinant baculovirus having post-translational modifications similar to those found in mammalian cells. It is the long form of Estrogen receptor-β.

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-estradiol[2] 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 promotor 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.

## 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 °C. Thaw in room temperature water bath and keep on ice during use. Do not vortex. Aliquots may be stored at –70 °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).

DMG/AGW 12/01