EGR-3
Human, Recombinant
Expressed in Sf9 insect cells

Product Number E3527
Storage Temperature –70 °C

Synonym: Pilot

Product Description
EGR (Early Growth Response) proteins represent a family of transcription factors involved in cell cycle regulation. They contain three, nearly identical DNA-binding zinc finger regions, each possessing a unique flanking region. EGR-1, -2, -3, and -4, bind the EGR-consensus sequence GCG T/GGG GCG, however the individual proteins show differing binding affinities for related sequences. The EGR binding sites are present in promoters of several tissue specific genes regulating cytokines and growth factors as well as genes regulating the cell cycle.

EGR-3 has been implicated in activation of the CD95L promoter upon T cell activation. EGR-3 is a potent activator of FasL expression. The activation-induced expression of EGR-3 can be inhibited by cyclosporin A.

Human recombinant EGR-3 is expressed in Sf9 insect cells infected with recombinant baculovirus containing a cDNA insert for human EGR-3. Human EGR-3, based on its cDNA sequence, is a 387 amino acid protein with a calculated molecular weight of 42.6 kDa.

Human recombinant EGR-3 is suitable for use in EMSA (electrophoretic mobility shift assay), in-vitro transcription assays, and nuclear extract analysis.

Reagents
Human recombinant EGR-3 is supplied as a frozen liquid containing at least 25 BFU (band-forming units) EGR-3 in 75 µL cell lysate supernatant containing 20 mM HEPES, pH 7.9, 420 mM NaCl, 1.5 mM MgCl2, 0.2 mM EDTA, and 25% glycerol.

Preparation Instructions
Dilution of the stock solution is not necessary. The thawed solution is sufficient for performing 25 gel shift assays under standard conditions.

Precautions and Disclaimer
EGR-1 is for laboratory use only. Not for drug household or other uses.

Storage/Stability
Store in working aliquots at –70 °C. Repeated freeze-thaw cycles should be avoided. Do not store in a frost-free freezer.

Product Profile
Activity is >0.33 BFU/µL. EGR-3 activity is measured by its ability to induce band shift of an oligonucleotide containing the sequence GCG GGG GCG labeled with 33P-γ-ATP. One BFU is sufficient to detect a band shift under standard conditions on native gel electrophoresis.

References

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