



Product Datasheet

Product Name	Growth Arrest and DNA-Damage-Inducible Gamma Human Recombinant
Cata No	CB501446
Source	<i>Escherichia Coli.</i>
Synonyms	DDIT2, GADD45gamma, GADD45G, Growth arrest and DNA-damage-inducible protein GADD45 gamma, Cytokine-responsive protein CR6, DNA-damage-inducible transcript 2, DDIT-2, CR6, GRP17.

Description

GADD45G is part of the nuclear proteins to interact with various proteins whose transcript levels are raised after stressful growth arrest conditions and treatment with DNA-damaging agents. GADD45G reacts to environmental stresses by mediating activation of the p38/JNK pathway which is mediated through their protein binding and activating MTK1/MEKK4 kinase, which is an upstream activator of both p38 and JNK MAPKs. GADD45G acts as a new-age tumor suppressor however is being frequently inactivated epigenetically in multiple tumors. GADD45G mRNA expression is down-regulated in hepatocellular carcinoma. GADD45G causes cell cycle arrest at G2/M transition when transfected into Hep-G2 cells. GADD45 Gamma induction by androgens involves new protein synthesis. Overexpression of GADD45 Gamma inhibits cell growth and causes morphological modifications in prostate cell lines thus GADD45 gamma takes part in differentiation induction by androgens. GADD45G Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 159 amino acids and having a molecular mass of 17.1 kDa.

Physical Appearance

Sterile Filtered colorless solution.

Purity

Greater than 95.0% as determined by SDS-PAGE.

Formulation

The GADD45G protein solution contains 20mM Tris-HCl pH-7.5 and 20% glycerol.

Stability

GADD45gamma although stable 4°C for 4 weeks, should be stored desiccated below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Please prevent freeze-thaw cycles.

Sequence

MTLEEVRGQD TVPESTARMQ GAGKALHELL
LSAQRQGCLT AGVYESAKVL NVDPDNVTF
VLAAGEEDEG DIALQIHFTL
IQAFCCENDIDIVRVGDVQR LAAIVGAGEE
AGAPGDLHCI LISNPEDAW KDPALEKLSL
FCEESRSVND WVPSITLPE.