

6-Phosphogluconate Dehydrogenate (6PGDH)

Product Information

Cat#	DIA-589
Descriptions	6-Phosphogluconate Dehydrogenate functions as a core oxidoreductase in pentose phosphate pathway. It catalyzes oxidative decarboxylation of 6-phosphogluconate to form ribulose 5-phosphate alongside NADPH, playing a vital role in maintaining cellular redox balance and serving as reliable biocatalyst for coenzyme preparation and metabolic pathway study.
Applications	6-Phosphogluconate Dehydrogenate (6PGDH) serves as a core functional enzyme for NADPH regeneration systems in biochemical detection kits and pentose phosphate pathway assay reagent development.
CAS No.	9073-95-4
Enzyme Commission Number	EC 1.1.1.44
Enzyme Source	E. coli-derived human 6-Phosphogluconate Dehydrogenase/PGD protein.
Reaction	6-phospho-D-gluconate + NADP ⁺ = CO ₂ + D-ribulose 5-phosphate + NADPH
Activity Definition	Measured by its ability to dehydrogenate 6-phosphogluconic acid under the described conditions.