## Recombinant Human PGD protein (His Tag)

Catalog Number: PDEH101015



Description				
Species	Human			
Mol_Mass	53.0 kDa			
Accession	P52209			
Bio-activity	Not validated for activity			
Properties				
Purity	> 95% as determined by reducing SDS-PAGE.			
Endotoxin	< 10 EU/mg of the protein as determined by the LAL method			
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80			
	°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of			
	reconstituted samples are stable at $< -20^{\circ}$ C for 3 months.			
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.			
Formulation	Lyophilized from a 0.2 $\mu$ m filtered solution in PBS with 5% Trehalose and 5%			
	Mannitol.			
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of			
	0.5 mg/mL. Concentration is measured by UV-Vis.			
Data	0.5 mg/mill concentration is inclusticed by 0 v-vis.			

Note: Centrifuge before opening to ensure complete recovery of vial contents.

KDa	М	R	
80	1		
60	-		
40	-		
30	-		
20	-		
10			
12	-		

> 95 % as determined by reducing SDS-PAGE.

## Background

6-phosphogluconate dehydrogenase(PGD) is a cytoplasm-located protein, and belongs to the 6-phosphogluconate dehydrogenase family. 6PGD is the second dehydrogenase in the pentose phosphate shunt. It catalyzes the oxidative decarboxylation of 6-phosphogluconate to ribulose 5-phosphate and CO2, with concomitant reduction of NADP to NADPH. Mutations within the gene coding this enzyme result in 6-phosphogluconate dehydrogenase deficiency, an autosomal hereditary disease effecting the red blood cells.

## For Research Use Only