

PYGB

Recombinant Human Glycogen Phosphorylase, Brain Form

Catalog No.	CRG512A CRG512B CRG512C	Quantity:	5 µg 20 µg 1.0 mg
Alternate Names:	GPBB		
Description:	Recombinant Human Glycogen Phosphorylase is expressed in <i>E. coli</i> as the mature form, aa 2-843. Glycogen Phosphorylase Brain (PYGB) is one of the phosphorylase enzymes (EC2.4.1.1). It breaks up glycogen into glucose subunits. Glycogen is left with one less glucose molecule, and the free glucose molecule is in the form of glucose-1-phosphate. In order to be used for metabolism, it must be converted to glucose-6-phosphate by the enzyme phosphoglucomutase. PYGB can only act on linear chains of glycogen (a 1-4 glycosidic linkage). Its work will immediately come to a halt four residues away from a 1-6 branch (which are exceedingly common in glycogen). In these situations, a debranching enzyme is necessary, which will straighten out the chain in that area. Additionally, an alpha 1-6 glucosidase enzyme is required to break the remaining 1-6 residue that remains in the new linear chain. After all this is done, PYGB can continue. An insulin stimulated enzyme known as phosphoprotein phosphatase (PP-1) inactivates PYGB to prevent glycogen break up.		
UniProt ID:	P11216		
Gene ID:	5834		
Concentration:	~1.0 mg/ml, lot specific		
Source:	<i>E. coli</i>		
Molecular Weight:	96.7 kDa (842 aa) monomer		
Formulation:	Sterile-filtered liquid formulation containing 50% glycerol.		
Purity:	> 85.0% as determined by RP-HPLC and SDS-PAGE.		
Storage & Stability:	Store unopened at -20°C to -80°C for up to 1 year. Avoid repeated freeze-thaw cycles.		
Applications:	Immunoassays and western blot.		

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

