

## Recombinant Human PTP-IA2 (Protein Tyrosine Phosphatase-IA2)

<b>Cat. No.:</b>	PTP054A	<b>Size:</b> 20 µg
<b>Description:</b>	PTP-IA2 (protein tyrosine phosphatase-IA2; also known as ICA-512), together with PTP-IAR, belongs to a subgroup of receptor-like protein tyrosine phosphatases. PTP-IA2 was found to be an autoantigen that is reactive with insulin-dependent diabetes mellitus (IDDM) patient sera, and thus may be a potential target of autoimmunity in diabetes mellitus. It is highly expressed in neuroendocrine tissues. Human PTP-IA2 is a receptor protein tyrosine phosphatase containing 979 amino acids. Recombinant human PTP-IA2 is expressed in <i>E. coli</i> ; it contains the catalytic domain of PTP-IA2 (residues 693-979), with a N-terminal GST tag, and has a molecular weight of 58.8 kDa.	
<b>Source:</b>	<i>E. coli</i>	
<b>Formulation:</b>	25 mM Tris-HCl (pH 8.0), 75 mM NaCl, 0.05% Tween-20, 2 mM EDTA, 1 mM DTT and 50% glycerol. Liquid at -20°C.	
<b>Purity:</b>	Greater than 95% as determined by Coomassie-stained SDS-PAGE gel.	
<b>Stability:</b>	3 months at -20°C.	
<b>Specific Activity:</b>	1.4 U/ug. One unit will hydrolyze 1 pmol of 6, 8-difluoro-4-methyl umbelliferyl phosphate (DiFMUP) per minute at pH 6.3 and 30°C. Assay buffer: 50 mM Bis-Tris (pH 6.3), 2 mM EDTA, 2 mM DTT and 100 mM DiFMUP.	
<b>Applications:</b>	Removal of phosphates from target substrates. Useful for the study of enzyme kinetics, regulation and for inhibitors screening.	

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