



# Human PDE5A peptide (DAG-P1864)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Antigen Description</b>	This gene encodes a cGMP-binding, cGMP-specific phosphodiesterase, a member of the cyclic nucleotide phosphodiesterase family. This phosphodiesterase specifically hydrolyzes cGMP to 5-GMP. It is involved in the regulation of intracellular concentrations of cyclic nucleotides and is important for smooth muscle relaxation in the cardiovascular system. Alternative splicing of this gene results in three transcript variants encoding distinct isoforms. [provided by RefSeq, Jul 2008]
<b>Specificity</b>	Expressed in aortic smooth muscle cells, heart, placenta, skeletal muscle and pancreas and, to a much lesser extent, in brain, liver and lung.
<b>Purity</b>	70 - 90% by HPLC.
<b>Conjugate</b>	Unconjugated
<b>Sequence Similarities</b>	Belongs to the cyclic nucleotide phosphodiesterase family. Contains 2 GAF domains.
<b>Format</b>	Liquid
<b>Preservative</b>	None
<b>Storage</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request.

## GENE INFORMATION

<b>Gene Name</b>	<a href="#">PDE5A phosphodiesterase 5A, cGMP-specific [ Homo sapiens (human) ]</a>
<b>Official Symbol</b>	PDE5A
<b>Synonyms</b>	PDE5A; phosphodiesterase 5A, cGMP-specific; CN5A; PDE5; CGB-PDE; cGMP-specific 3,5-cyclic phosphodiesterase; phosphodiesterase isozyme 5; cGMP-specific phosphodiesterase

PDE5A2; cGMP-specific phosphodiesterase type 5A; cGMP-binding cGMP-specific 3,5-cyclic nucleotide phosphodiesterase;

Entrez Gene ID	<a href="#">8654</a>
mRNA Refseq	<a href="#">NM_001083.3</a>
Protein Refseq	<a href="#">NP_001074.2</a>
UniProt ID	O76074
Chromosome Location	4q27
Pathway	Hemostasis, organism-specific biosystem; Nitric oxide stimulates guanylate cyclase, organism-specific biosystem; Platelet homeostasis, organism-specific biosystem; Purine metabolism, organism-specific biosystem; Purine metabolism, conserved biosystem; cGMP effects, organism-specific biosystem;
Function	3,5-cyclic-GMP phosphodiesterase activity; 3,5-cyclic-nucleotide phosphodiesterase activity; cGMP binding; metal ion binding;