



Human IMPDH1 peptide (DAG-P1687)

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

PRODUCT INFORMATION

Antigen Description	The protein encoded by this gene acts as a homotetramer to regulate cell growth. The encoded protein is an enzyme that catalyzes the synthesis of xanthine monophosphate (XMP) from inosine-5-monophosphate (IMP). This is the rate-limiting step in the de novo synthesis of guanine nucleotides. Defects in this gene are a cause of retinitis pigmentosa type 10 (RP10). Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Dec 2008]
Specificity	IMP type I is the main species in normal leukocytes and type II predominates over type I in the tumor.
Conjugate	Unconjugated
Sequence Similarities	Belongs to the IMPDH/GMPR family. Contains 2 CBS domains.
Format	Liquid
Preservative	None
Storage	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

Gene Name	IMPDH1 IMP (inosine 5-monophosphate) dehydrogenase 1 [Homo sapiens (human)]
Official Symbol	IMPDH1
Synonyms	IMPDH1; IMP (inosine 5-monophosphate) dehydrogenase 1; IMPD; RP10; IMPD1; LCA11; SWSS2608; inosine-5-monophosphate dehydrogenase 1; IMPD 1; IMPDH 1; IMPDH-I; IMP dehydrogenase 1; IMP (inosine monophosphate) dehydrogenase 1;

Entrez Gene ID	3614
mRNA Refseq	NM_000883.3
Protein Refseq	NP_000874.2
UniProt ID	B3KRZ3
Chromosome Location	7q31.3-q32
Pathway	Drug metabolism - other enzymes, organism-specific biosystem; Drug metabolism - other enzymes, conserved biosystem; Guanine ribonucleotide biosynthesis IMP => GDP,GTP, organism-specific biosystem; Guanine ribonucleotide biosynthesis IMP => GDP,GTP, conserved biosystem; Metabolism, organism-specific biosystem; Metabolism of nucleotides, organism-specific biosystem; Nucleotide Metabolism, organism-specific biosystem; Purine metabolism, organism-specific biosystem; Purine metabolism, organism-speci
Function	DNA binding; IMP dehydrogenase activity; RNA binding; adenyl nucleotide binding; metal ion binding; nucleic acid binding;