OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for TP760453

PAX6 (NM_001604) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Human paired box 6 (PAX6), transcript variant 2, full length, with N-terminal HIS tag, expressed in E.Coli, 50ug
Species:	Human
Expression Host:	E. coli
Tag:	N-His
Predicted MW:	48 kDa
Concentration:	>50 ug/mL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25mM Tris, pH8.0, 150 mM NaCl, 10% glycerol, 1 % Sarkosyl.
Storage:	Store at -80°C.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	NP_001595
Locus ID:	5080
UniProt ID:	P26367, F1T0F8
RefSeq Size:	2781
Cytogenetics:	11p13
RefSeq ORF:	1308
Synonyms:	AN; AN1; AN2; ASGD5; D11S812E; FVH1; MGDA; WAGR

View online »

Summary: This gene encodes paired box protein Pax-6, one of many human homologs of the Drosophila melanogaster gene prd. In addition to a conserved paired box domain, a hallmark feature of this gene family, the encoded protein also contains a homeobox domain. Both domains are known to bind DNA and function as regulators of gene transcription. Activity of this protein is key in the development of neural tissues, particularly the eye. This gene is regulated by multiple enhancers located up to hundreds of kilobases distant from this locus. Mutations in this gene or in the enhancer regions can cause ocular disorders such as aniridia and Peter's anomaly. Use of alternate promoters and alternative splicing results in multiple transcript variants encoding different isoforms. Interestingly, inclusion of a particular alternate coding exon has been shown to increase the length of the paired box domain and alter its DNA binding specificity. Consequently, isoforms that carry the shorter paired box domain regulate a different set of genes compared to the isoforms carrying the longer paired box domain. [provided by RefSeq, Mar 2019]

Protein Families: Adult stem cells, Druggable Genome, Embryonic stem cells, Transcription Factors

Protein Pathways: Maturity onset diabetes of the young

Product images: