



Anti-ORC1 (aa 1-110) polyclonal antibody (DPAB-DC2067)

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

PRODUCT INFORMATION

Antigen Description	The origin recognition complex (ORC) is a highly conserved six subunits protein complex essential for the initiation of the DNA replication in eukaryotic cells. Studies in yeast demonstrated that ORC binds specifically to origins of replication and serves as a platform for the assembly of additional initiation factors such as Cdc6 and Mcm proteins. The protein encoded by this gene is the largest subunit of the ORC complex. While other ORC subunits are stable throughout the cell cycle, the levels of this protein vary during the cell cycle, which has been shown to be controlled by ubiquitin-mediated proteolysis after initiation of DNA replication. This protein is found to be selectively phosphorylated during mitosis. It is also reported to interact with MYST histone acetyltransferase 2 (MyST2/HBO1), a protein involved in control of transcription silencing. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.
Immunogen	ORC1L (AAH11539, 1 a.a. ~ 110 a.a) partial recombinant protein with GST tag. The sequence is MAHYPTRLKTRKTYSWVGRPLLDRLHYQTYREMCVKTEGCSTEIHIQIGQFVLIEGDDD ENPYVAKLLELFEDDSDPPPKKRARVQWVFRFCEVPACKRHLLGRKPGAQ
Source/Host	Mouse
Species Reactivity	Human
Conjugate	Unconjugated
Applications	WB (Recombinant protein), ELISA,
Size	50 µl
Buffer	50 % glycerol
Preservative	None

Storage

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

GENE INFORMATION

Gene Name	ORC1 origin recognition complex, subunit 1 [Homo sapiens (human)]
Official Symbol	ORC1
Synonyms	ORC1; origin recognition complex, subunit 1; ORC1L; PARC1; HSORC1; origin recognition complex subunit 1; replication control protein 1; origin recognition complex, subunit 1 homolog;
Entrez Gene ID	4998
Protein Refseq	NP_001177747
UniProt ID	Q13415
Chromosome Location	1p32
Pathway	Activation of ATR in response to replication stress; Assembly of the ORC complex at the origin of replication; Association of licensing factors with the pre-replicative complex; CDT1 association with the CDC6:ORC:origin complex
Function	ATP binding; DNA binding; chromatin binding; nucleoside-triphosphatase activity