



## 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  
MAHYPTRLKTRKTYSWVGRPLLDRLKLHYQTYREMCVKTEGCSTEIHIQIGQFVLIEGDDD  
ENPYVAKLLELFEDDSDPKKRARVQWFVRFCEVPACKRHLLGRKPGAQ

#### 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.

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## GENE INFORMATION

<b>Gene Name</b>	<a href="#">ORC1 origin recognition complex, subunit 1 [ Homo sapiens (human) ]</a>
<b>Official Symbol</b>	ORC1
<b>Synonyms</b>	ORC1; origin recognition complex, subunit 1; ORC1L; PARC1; HSORC1; origin recognition complex subunit 1; replication control protein 1; origin recognition complex, subunit 1 homolog;
<b>Entrez Gene ID</b>	<a href="#">4998</a>
<b>Protein Refseq</b>	<a href="#">NP_001177747</a>
<b>UniProt ID</b>	<a href="#">Q13415</a>
<b>Chromosome Location</b>	1p32
<b>Pathway</b>	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
<b>Function</b>	ATP binding; DNA binding; chromatin binding; nucleoside-triphosphatase activity

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