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ORC2L Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14497c

Product Information

Application	WB, E
Primary Accession	Q13416
Other Accession	NP_006181.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	65972
Antigen Region	208-237

Additional Information

Gene ID	4999
Other Names	Origin recognition complex subunit 2, ORC2, ORC2L
Target/Specificity	This ORC2L antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 208-237 amino acids from the Central region of human ORC2L.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	ORC2L Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ORC2
Synonyms	ORC2L
Function	Component of the origin recognition complex (ORC) that binds origins of replication. DNA-binding is ATP-dependent. The specific DNA sequences that define origins of replication have not been identified yet. ORC is required to

assemble the pre-replication complex necessary to initiate DNA replication. Binds histone H3 and H4 trimethylation marks H3K9me3, H3K20me3 and H4K27me3. Stabilizes LRWD1, by protecting it from ubiquitin-mediated proteasomal degradation. Also stabilizes ORC3.

Cellular Location Nucleus.

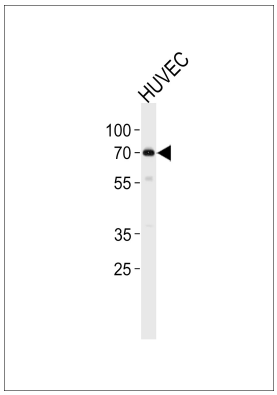
Background

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 a subunit of the ORC complex. This protein forms a core complex with ORC3, -4, and -5. It also interacts with CDC45 and MCM10, which are proteins known to be important for the initiation of DNA replication. This protein has been demonstrated to specifically associate with the origin of replication of Epstein-Barr virus in human cells, and is thought to be required for DNA replication from viral origin of replication. Alternatively spliced transcript variants have been found, one of which is a nonsense-mediated mRNA decay candidate.

References

Huen, M.S., et al. Cell 131(5):901-914(2007)
Siddiqui, K., et al. J. Biol. Chem. 282(44):32370-32383(2007)
Olsen, J.V., et al. Cell 127(3):635-648(2006)
Radichev, I., et al. J. Biol. Chem. 281(32):23264-23273(2006)
Teer, J.K., et al. J. Biol. Chem. 281(10):6253-6260(2006)

Images



ORC2L Antibody (Center) (Cat. #AP14497c) western blot analysis in HUVEC cell line lysates (35ug/lane).This demonstrates the ORC2L antibody detected the ORC2L protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.