

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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# ORC6 (h3): 293 Lysate: sc-129354



The Power to Question

#### **BACKGROUND**

The initiation of DNA replication is a multi-step process that depends on the formation of pre-replication complexes, which trigger initiation. Among the proteins required for establishing these complexes are the origin recognition complex (ORC) proteins. ORC proteins bind specifically to origins of replication where they serve as scaffold for the assembly of additional initiation factors. Human ORC subunits 1–6 are expressed in the nucleus of proliferating cells and tissues, such as the testis. ORC1 and ORC2 are both expressed at equivalent concentrations throughout the cell cycle; however, only ORC2 remains stably bound to chromatin. ORC4 and ORC6 are also expressed constantly throughout the cell cycle. ORC2, ORC3, ORC4 and ORC5 form a core complex upon which the ORC6 and ORC1 assemble. The formation of this core complex suggests ORC proteins play a crucial role in the  $G_1$ -S transition in mammalian cells.

#### **REFERENCES**

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- 3. Thome, K.C., Dhar, S.K., Quintana, D.G., Delmolino, L., Shahsafaei, A. and Dutta, A. 2000. Subsets of human origin recognition complex (ORC) subunits are expressed in non-proliferating cells and associate with non-ORC proteins. J. Biol. Chem. 275: 35233-35241.
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- Natale, D.A., Li, C.J., Sun, W.H. and DePamphilis, M.L. 2000. Selective instability of Orc1 protein accounts for the absence of functional origin recognition complexes during the M-G<sub>1</sub> transition in mammals. EMBO J. 19: 2728-2738.
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#### **CHROMOSOMAL LOCATION**

Genetic locus: ORC6L (human) mapping to 16q11.2.

#### **PRODUCT**

ORC6 (h3): 293 Lysate represents a lysate of human ORC6 transfected 293 cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l SDS-PAGE buffer.

#### **STORAGE**

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

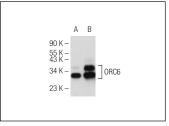
#### **APPLICATIONS**

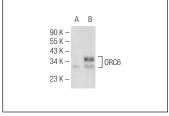
ORC6 (h3): 293 Lysate is suitable as a Western Blotting positive control for human reactive ORC6 antibodies. Recommended use: 10-20 µl per lane.

Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

ORC6 (3A4): sc-32735 is recommended as a positive control antibody for Western Blot analysis of enhanced human ORC6 expression in ORC6 transfected 293 cells (starting dilution 1:100, dilution range 1:100-1:1,000).

#### **DATA**





ORC6 (3A4): sc-32735. Western blot analysis of ORC6 expression in non-transfected: sc-110760 (**A**) and human ORC6 transfected: sc-129354 (**B**) 293 whole rell lysates

ORC6 (2679C2b): sc-81646. Western blot analysis of ORC6 expression in non-transfected: sc-110760 (A) and human ORC6 transfected: sc-129354 (B) 293 whole cell lysates.

#### **RESEARCH USE**

For research use only, not for use in diagnostic procedures

#### **PROTOCOLS**

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