

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten! See the following pages for more information!



## Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

## Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

linkedin.com/company/szaboscandic in



# HR (h): 293T Lysate: sc-116984



The Power to Question

#### **BACKGROUND**

HR (protein hairless) is a 1,189 amino acid protein which is expressed as 2 isoforms produced by alternative splicing. The two isoforms are expressed in a variety of tissues in varying concentrations. Isoform 1 is more abundant than isoform 2 and is expressed at low levels in kidneys and testis, while isoform 2 is expressed abundantly in skin. Both isoforms are also present together in many tissues and are expressed strongly in small intestine and brain and weakly in trachea. HR is thought to be a transcription factor involved in hair growth. Hair growth occurs in three phases, known as anagen, catagen and telogen, which are phases where growth, regression and rest, respectively, are taking place. By unknown mechanisms, HR is thought to regulate one of the hair growth phases, and to work with vitamin D receptor (VDR) to regulate hair follicle cycling. Defects in HR may cause two serious ailments known as alopecia universalis congenita (ALUNC) and atrichia with papular lesions (APL), which is also referred to as congenital atrichia. Both are autosomally recessive impairments. ALUNC is a rare condition in which hair follicles are produced without hair, while APL is a serious disease in which papillary lesions may cover the body and little to no hair is grown.

#### **REFERENCES**

- Potter, G.B., et al. 2001. The hairless gene mutated in congenital hair loss disorders encodes a novel nuclear receptor corepressor. Genes Dev. 15: 2687-2701.
- Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 602302. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- Djabali, K. and Christiano, A.M. 2004. Hairless contains a novel nuclear matrix targeting signal and associates with histone deacetylase 3 in nuclear speckles. Differentiation 72: 410-418.
- 4. Bergman, R., et al. 2005. The alopecias associated with vitamin D-dependent rickets type IIA and with hairless gene mutations: a comparative clinical, histologic, and immunohistochemical study. Arch. Dermatol. 141: 343-351.
- Skorija, K., et al. 2005. Ligand-independent actions of the vitamin D receptor maintain hair follicle homeostasis. Mol. Endocrinol. 19: 855-862.
- Zhang, J.T., et al. 2005. Molecular cloning of full-long cDNA sequences encoding hairless gene in the Kunming mouse. Yi Chuan 27: 908-914.
- 7. Bikle, D.D., et al. 2006. Development and progression of alopecia in the vitamin D receptor null mouse. J. Cell. Physiol. 207: 340-353.
- 8. Brancaz-Bouvier, M.V., et al. 2008. The "bald mill hill" mutation in the mouse is associated with an abnormal, mislocalized HR bmh protein. J. Invest. Dermatol. 128: 311-321.
- 9. Engelhard, A., et al. 2008. Ligand-independent regulation of the hairless promoter by vitamin D receptor. Photochem. Photobiol. 84: 515-521.

#### **CHROMOSOMAL LOCATION**

Genetic locus: HR (human) mapping to 8p21.3.

#### **RESEARCH USE**

For research use only, not for use in diagnostic procedures.

#### **PRODUCT**

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

#### **APPLICATIONS**

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

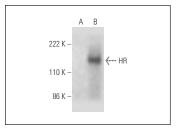
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

HR (D-4): sc-398176 is recommended as a positive control antibody for Western Blot analysis of enhanced human HR expression in HR transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

#### **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG $\kappa$  BP-HRP: sc-516102 or m-lgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>TM</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

#### **DATA**



HR (D-4): sc-398176. Western blot analysis of HR expression in non-transfected: sc-117752 (A) and human HR transfected: sc-116984 (B) 293T whole cell Ivsates.

#### **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.

#### **PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.

**Santa Cruz Biotechnology, Inc.** 1.800.457.3801 831.457.3800 fax 831.457.3801 **Europe** +00800 4573 8000 49 6221 4503 0 **www.scbt.com**