

Datasheet for ABIN302102

anti-VCP antibody

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Overview

Quantity:	0.1 mg
Target:	VCP
Reactivity:	Human, Mouse
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This VCP antibody is un-conjugated
Application:	Western Blotting (WB), Immunocytochemistry (ICC), Flow Cytometry (FACS)

Product Details

Immunogen:	Freshly ejaculated human sperms were washed in PBS and extracted in 3% acetic acid, 10% glycerol, 30 mM benzaminidine. The acid extract was dialyzed against 0.2% acetic acid and subsequently used for immunization.
Clone:	Hs-14
Isotype:	IgM
Specificity:	The antibody Hs-14 reacts with VCP (valosin-containing protein) a 220 kDa intra-acrosomal protein.
Cross-Reactivity (Details):	Mouse, Human
Purification:	Purified by sequential steps of physicochemical fractionation (differential precipitation and solid-phase chromatography methods).
Purity:	> 95 % (by SDS-PAGE)

Target Details

Target:	VCP
Alternative Name:	VCP (VCP Products)
Background:	Valosin containing protein,VCP (valosin-containing protein), also known as p97, TERA, ALS14, IBMPFD, HEL-220, IBMPFD1, or HEL-S-70, is a member of a protein family that includes putative ATP-binding proteins involved in vesicle transport and fusion, 26S proteasome function, and assembly of peroxisomes. VCP is a structural protein that associates with clathrin and heat-shock protein Hsc70, to form a complex. It has been implicated in a number of cellular events that are regulated during mitosis, including homotypic membrane fusion, spindle pole body function, and ubiquitin-dependent protein degradation. In sperm this intra-acrosomal protein can be used as a marker for evaluation of the physiological state of sperm cells as well as for selection of a suitable method of fertilization in the laboratories of assisted reproduction.,TERA, CDC48
Gene ID:	7415
UniProt:	P55072
Pathways:	ER-Nucleus Signaling , Positive Regulation of Endopeptidase Activity , Ubiquitin Proteasome Pathway

Application Details

Application Notes:	Immunocytochemistry: Recommended dilution: 10 µg/mL, membrane permeabilization (acetone) is essential. The antibody Hs-14 is designed for quantitative immunofluorescence analysis of pathological sperms (excellent tool for laboratories of assisted reproduction when optimal method of fertilization is sought). Flow cytometry: Intraacrosomal staining, recommended dilution: 3-12 µg/mL.
Restrictions:	For Research Use only

Handling

Concentration:	1 mg/mL
Buffer:	Tris buffered saline (TBS), pH 8.0, 15 mM sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Handling

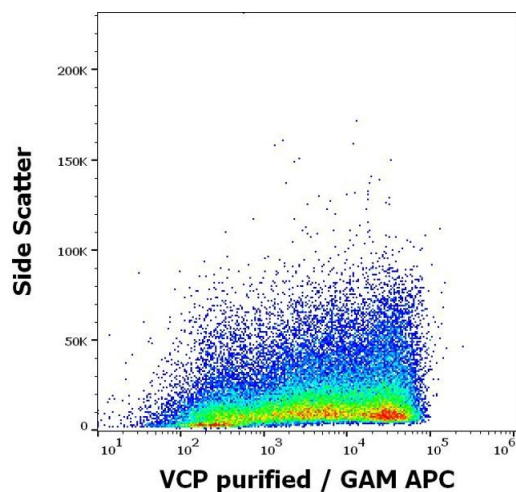
Handling Advice:	Do not freeze.
Storage:	4 °C
Storage Comment:	Store at 2-8°C. Do not freeze.

Publications

Product cited in: Peknicova, Chladek, Hozak: "Monoclonal antibodies against sperm intra-acrosomal antigens as markers for male infertility diagnostics and estimation of spermatogenesis." in: **American journal of reproductive immunology (New York, N.Y. : 1989)**, Vol. 53, Issue 1, pp. 42-9, (2005) ([PubMed](#)).

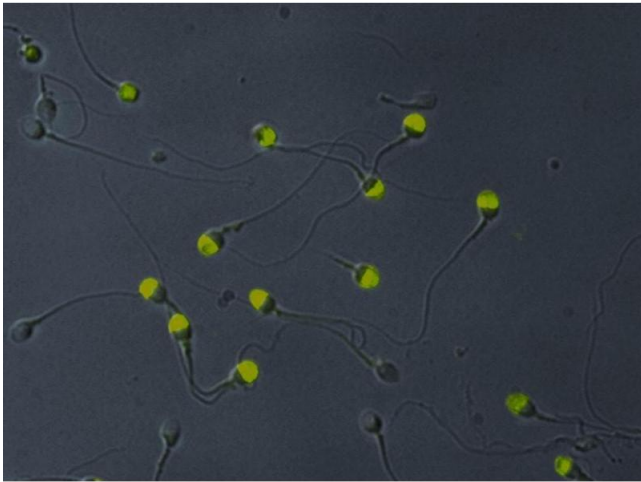
Chládek, P?knicová, Capková, Geussová, Teplá, Madar: "[Use of human sperm protein monoclonal antibodies in the diagnosis of sperm pathology and selection of a suitable assisted reproduction method for fertilization]." in: **Ceská gynekologie / Česká lékařská společnost J. Ev. Purkyne**, Vol. 65, Issue 1, pp. 28-32, (2000) ([PubMed](#)).

Images



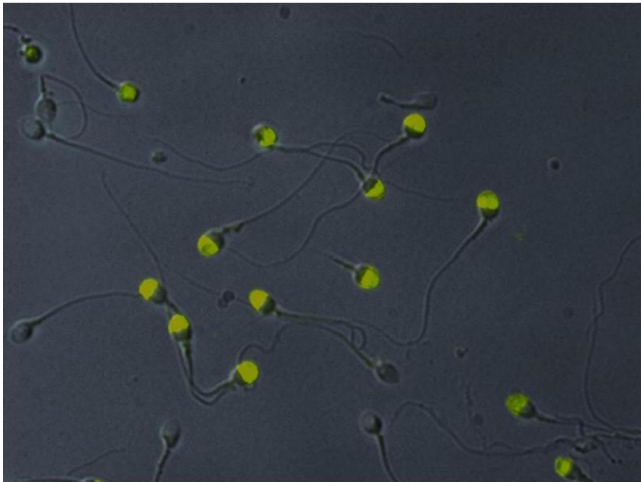
Flow Cytometry

Image 1. Flow cytometry intracellular staining pattern of human sperm cells stained using anti-VCP (Hs-14) purified antibody (concentration in sample 9 µg/mL) GAM APC.



Immunofluorescence

Image 2. Immunofluorescence analysis of VCP in acetone-permeabilized human sperms using monoclonal antibody Hs-14 demonstrates its location to the acrosome. (Normal spermiogram shown).



Immunocytochemistry

Image 3. Immunocytochemistry analysis of VCP in acetone-permeabilized human sperms (normal spermiogram) using monoclonal antibody Hs-14 demonstrates its location to the acrosome.

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN302102.