

## Acrosome

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In spermatozoa of many animals, the Acrosome is an organelle that develops over the anterior half of the sperm's head. It is a cap-like structure derived from the Golgi apparatus. Acrosome formation is completed during testicular maturation. In Eutherian mammals the acrosome contains digestive enzymes. These enzymes breakdown the outer membrane of the ovum called the zona pellucida, allowing the haploid nuclei in the sperm to join with the haploid nucleus found in the ova. ([From the Wikipedia article Acrosome.](#))

### Recent Publications on Acrosome:



- [The "switching on" of mammalian spermatozoa: Molecular events involved in promotion and regulation of capacitation.](#)  
*Following the discovery of mammalian sperm capacitation and its...*13th November, 2009  
Division of Reproduction and Endocrinology, School of Biomedical and- Mol Reprod Dev. 2009 Nov 11. ([DOI Direct Link](#))
- [In Vitro Fertilization and Sperm Cryopreservation in the Black-Footed Cat \(\*Felis nigripes\*\) and Sand Cat \(\*Felis margarita\*\).](#)  
*Studies of in vitro fertilization (IVF) and sperm cryopreservation have...*13th November, 2009  
- Biol Reprod. 2009 Nov 11. ([DOI Direct Link](#))
- [Use of the hypo-osmotic swelling test and aniline blue staining to improve the evaluation of seasonal sperm variation in native Spanish free-range poultry.](#)  
*The season may affect the values of fresh semen variables and therefore...*12th November, 2009  
Departamento de Reproduccion Animal, and.- Poult Sci. 2009 Dec;88(12):2661-9. ([DOI Direct Link](#))
- [Antifertility Characteristics of the N-terminal Region of Mouse Equatorial Segment Protein.](#)  
*To investigate antifertility characteristics of the equatorial segment...*10th November, 2009  
Department of Histology and Embryology, Shanghai Jiao Tong University- Anat Rec (Hoboken). 2009 Nov 6. ([DOI Direct Link](#))
- [OAZ-t/OAZ3 is essential for rigid connection of sperm tails to heads in mouse.](#)  
*Polyamines are known to play important roles in the proliferation and...*7th November, 2009  
TANAKA Project, Center for Advanced Science and Innovation, Osaka- PLoS Genet. 2009 Nov;5(11):e1000712. Epub 2009 Nov 6. ([DOI Direct Link](#))
- [Usefulness of the Addition of Orvus ES Paste and Sodium Lauryl Sulfate to Frozen Feline Semen.](#)  
*It has been shown that the addition of the surfactant Orvus ES paste (OEP)...*7th November, 2009  
Department of Reproduction, Nippon Veterinary & Life Science University.- J Vet Med Sci. 2009 Nov 5.
- [Can a cumulus cell complex be used to select spermatozoa for assisted reproduction?](#)  
*Since the onset of intracytoplasmic sperm injection, researchers have...*7th November, 2009  
Department of Medical Biosciences, University of the Western Cape,- Andrologia. 2009 Dec;41(6):369-76. ([DOI Direct Link](#))

- [TLRR \(Irrc67\) interacts with PP1 and is associated with a cytoskeletal complex in the testis.](#)  
*Background Information: Spermatozoa are formed via a complex series of...*6th November, 2009  
- Biol Cell. 2009 Nov 4. ([DOI Direct Link](#))
- [Sperm ultrastructure of the spider crab Maja brachydactyla \(Decapoda: Brachyura\).](#)  
*This study describes the morphology of the sperm cell of Maja...*4th November, 2009  
IRTA Sant Carles de la Rapita, Tarragona, Spain.- J Morphol. 2009 Nov 2. ([DOI Direct Link](#))
- [Spermatogenesis of the spider crab Maja brachydactyla \(Decapoda: Brachyura\).](#)  
*This study describes spermatogenesis in a majid crab (Maja brachydactyla)...*4th November, 2009  
IRTA Sant Carles de la Rapita, Tarragona, Spain.- J Morphol. 2009 Nov 2. ([DOI Direct Link](#))
- [Effects of different extenders and centrifugation/washing on postthaw microscopic-oxidative stress parameters and fertilizing ability of Angora buck sperm.](#)  
*The main objective of the current study was to evaluate the effects of...*3rd November, 2009  
Erciyes University, Safiye Cikrikcioglu Vocational College, Kayseri,- Theriogenology. 2009 Oct 30. ([DOI Direct Link](#))
- [\[Role of active oxygen forms in spermatogenesis regulation and fertilization in mammals\]](#)  
*Modern ideas about biologic value of active oxygen forms in the processes...*3rd November, 2009  
- Ukr Biokhim Zh. 2009 Jan-Feb;81(1):14-22.
- [Flow-Cytometric Analyses of Viability Biomarkers in Pesticide-Exposed Sperm of Three Aquatic Invertebrates.](#)  
*Toxicity studies on sperm often use fertilization success as the end...*31st October, 2009  
Department of Biological Sciences, Louisiana State University, 202 Life- Arch Environ Contam Toxicol. 2009 Oct 30. ([DOI Direct Link](#))
- [The multifunctional zona pellucida and mammalian fertilization.](#)  
*An early step in mammalian fertilization is species-restricted binding of...*31st October, 2009  
Department of Developmental and Regenerative Biology, Mount Sinai School- J Reprod Immunol. 2009 Oct 27. ([DOI Direct Link](#))
- [Effects of glycodelins on functional competence of spermatozoa.](#)  
*Glycodelin is a glycoprotein with 4 known glycoforms, namely glycodelin-S,...*28th October, 2009  
Department of Obstetrics and Gynaecology, University of Hong Kong, Queen- J Reprod Immunol. 2009 Oct 24. ([DOI Direct Link](#))

#### Acrosome Clinical Trials:



- [Human Sperm Binding to Transgenic Mouse Eggs](#)

#### Acrosome Patents:



- 7169548- [Sperm cell processing and preservation systems](#)
- 7262039- [Polypeptide](#)
- 7271243- [Full-length human cDNAs encoding potentially secreted proteins](#)
- 7273694- [Method and apparatus for reducing pathogens in a biological sample](#)
- 7276329- [Method of sorting cells](#)
- 7291495- [.beta.-Secretase variant](#)
- 7294755- [Genetic modification of male germ cells for generation of transgenic species and genetic therapies](#)
- 7304086- [Inhibitors of glutaminyl cyclase](#)
- 7309699- [3-Quinuclidinyl amino-substituted biaryl derivatives](#)
- 7335507- [Process for the staining of sperm](#)
- 7339029- [Sperm-specific cation channel, CatSper2, and uses therefor](#)
- 7250496- [Bioinformatically detectable group of novel regulatory genes and uses thereof](#)
- 7241773- [3-quinuclidinyl heteroatom bridged biaryl derivatives](#)
- 7235634- [2786, a novel human aminopeptidase](#)
- 7176229- [Cyclic AMP-specific phosphodiesterase inhibitors](#)
- 7179641- [Device for motile sperm separation](#)
- 7189826- [Monoclonal human natural antibodies](#)
- 7195920- [Collection systems for cytometer sorting of sperm](#)
- 7199082- [Methods for extending the freshness of cut flowers, ornamental trees, and plant cuttings](#)
- 7202211- [Methods of preventing or treating brain ischemia or brain injury](#)
- 7208265- [Method of cryopreserving selected sperm cells](#)
- 7217525- [Method for identifying compounds which affect ionotropic glutamate receptor aggregation](#)
- 7221453- [Optical apparatus](#)
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- 7339090- [Microinjection devices and methods of use](#)
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- 7459156- [Antibodies that mimic actions of neurotrophins](#)
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- 7476693- [Suramin and derivatives thereof as topical microbicide and contraceptive](#)
- 7485430- [Methods and compositions for evaluation of fertility](#)
- 7494780- [Epididymis-specific defensin for evaluating and regulating male fertility](#)
- 7511126- [Position-independent and tissue specific expression of a transgene in milk of transgenic animals](#)
- 7531299- [In vitro uptake of SPAM 1 \(PH-20\) by mammalian sperm](#)
- 7417066- [Inhibitors of soluble adenylate cyclase](#)
- 7413861- [Methods for predicting increase sperm ejaculate in a varicocele associated fertility patient](#)
- 7407933- [Drug containing angiotensin convertase](#)
- 7368249- [Methods and compositions for evaluation and modulation of fertility](#)
- 7371517- [High purity X-chromosome bearing and Y-chromosome bearing populations of spermatozoa](#)
- 7371871- [Inhibitors of glutaminyl cyclase](#)
- 7371922- [Nuclear transfer with porcine embryonic stem cells](#)
- 7381537- [Use of inhibitors of glutaminyl cyclases for treatment and prevention of disease](#)
- 7384913- [PT32 sperm protein, sperm c-Yes, oocyte cytoplasmic c-Yes, and uses thereof](#)
- 7399765- [Substituted diazabicycloalkane derivatives](#)
- 7405036- [Process for reducing pathogens in a biological sample and removing a sample pellet from a sample tube](#)
- 7405077- [Sperm protein 17 for the diagnosis and treatment of cancer](#)
- 7405202- [CRISP polypeptides as contraceptives and inhibitors of sperm capacitation](#)
- 7586604- [Optical apparatus](#)

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