

References

Description

- Alberts B, J.A., Walter P , Lewis J, Raff M and Roberts K. Molecular Biology of the Cell (Taylor and Francis, 2008).
- Albersdörfer, A. & Sackmann, E. Swelling behavior and viscoelasticity of ultrathin grafted hyaluronic acid films. *European Physical Journal B* 10, 663-672 (1999).
- Attili, S., Borisov, O.V. & Richter, R.P. Films of end-grafted hyaluronan are a prototype of a brush of a strongly charged, semi-flexible polyelectrolyte with intrinsic excluded volume. . *Biomacromolecules* 13, 1466-1477 (2012).
- Ball, G.D., et al. Factors affecting successful in vitro fertilization of bovine follicular oocytes. *Biol Reprod* 28, 717-725 (1983).
- Baranova N.S. et al., The inflammation-associated protein TSG-6 cross-links hyaluronan via hyaluronan-induced TSG-6 oligomers. *J Biol Chem* 288, 25675-25686 (2011).
- Baranova N.S. et al., Inter- α -inhibitor impairs TSG-6 induced hyaluronan cross-linking.-* *J Biol Chem* 288, 29642-29653 (2013).
- Baranova, N.S., et al., Incorporation of PTX3 into hyaluronan matrices is tightly regulated and promotes matrix cross-linking ; *J Biol Chem* 289, 30481-30498 (2014).
- Benz, M., Chen, N. & Israelachvili, J. Lubrication and wear properties of grafted polyelectrolytes, hyaluronan and hylan, measured in the surface forces apparatus. *J Biomed Mater Res A* 71, 6-15 (2004).
- Blom, A., Pertoft, H. & Fries, E. Inter-alpha-inhibitor is required for the formation of the hyaluronan-containing coat on fibroblasts and mesothelial cells. *J Biol Chem* 270, 9698-9701 (1995).
- Blom, A.M., Morgelin, M., Oyen, M., Jarvet, J. & Fries, E. Structural characterization of inter-alpha-inhibitor. Evidence for an extended shape. *J Biol Chem* 274, 298-304 (1999).
- Blundell, C.D., et al. Getting to grips with HA-protein interactions. in *Hyaluronan 2000* (ed. Kennedy) (2002).
- Blundell, C.D., et al. The link module from ovulation- and inflammation-associated protein TSG-6 changes conformation on hyaluronan binding. *Journal of Biological Chemistry* 278, 49261-49270 (2003).
- Blundell, C.D., et al. Towards a structure for a TSG-6.hyaluronan complex by modeling and NMR spectroscopy : insights into other members of the link module superfamily. *J Biol Chem* 280, 18189-18201 (2005).
- Boehm, H., et al. Mapping the mechanics and macromolecular organization of hyaluronan-rich cell coats. *Soft Matter* 5, 4331-4337 (2009).
- Bost, F., Diarra-Mehrpour, M. & Martin, J.P. Inter-alpha-trypsin inhibitor proteoglycan family—a group of proteins binding and stabilizing the extracellular matrix. *Eur J Biochem* 252, 339-346 (1998).
- Bottazzi, B., et al. Multimer formation and ligand recognition by the long pentraxin PTX3. Similarities and differences with the short pentraxins C-reactive protein and serum amyloid P component. *J Biol Chem* 272, 32817-32823 (1997).
- Bottazzi, B., et al. The long pentraxin PTX3 as a prototypic humoral pattern recognition receptor : interplay with cellular innate immunity. *Immunol Rev* 227, 9-18 (2009).

- Brecht, M., Mayer, U., Schlosser, E. & Prehm, P. Increased hyaluronate synthesis is required for fibroblast detachment and mitosis. *Biochem J* 239, 445-450 (1986).
- Breviario, F., et al. Interleukin-1-inducible genes in endothelial cells. Cloning of a new gene related to C-reactive protein and serum amyloid P component. *J Biol Chem* 267, 22190-22197 (1992).
- Brown, H.M., et al. ADAMTS1 cleavage of versican mediates essential structural remodeling of the ovarian follicle and cumulus-oocyte matrix during ovulation in mice. *Biol Reprod* 83, 549-557.
- Burke, S.E. & Barrett, C.J. pH-responsive properties of multilayered poly(L-lysine)/hyaluronic acid surfaces. *Biomacromolecules* 4, 1773-1783 (2003).
- Carrette, O., Nemade, R.V., Day, A.J., Brickner, A. & Larsen, W.J. TSG-6 is concentrated in the extracellular matrix of mouse cumulus oocyte complexes through hyaluronan and inter-alpha-inhibitor binding. *Biol Reprod* 65, 301-308 (2001).
- Chen, L., Mao, S.J. & Larsen, W.J. Identification of a factor in fetal bovine serum that stabilizes the cumulus extracellular matrix. A role for a member of the inter-alpha-trypsin inhibitor family. *J Biol Chem* 267, 12380-12386 (1992).
- Chen, L., Mao, S.J., McLean, L.R., Powers, R.W. & Larsen, W.J. Proteins of the inter-alpha-trypsin inhibitor family stabilize the cumulus extracellular matrix through their direct binding with hyaluronic acid. *J Biol Chem* 269, 28282-28287 (1994).
- Chen, L., Zhang, H., Powers, R.W., Russell, P.T. & Larsen, W.J. Covalent linkage between proteins of the inter-alpha-inhibitor family and hyaluronic acid is mediated by a factor produced by granulosa cells. *J Biol Chem* 271, 19409-19414 (1996).
- Cherr, G.N., Yudin, A.I. & Katz, D.F. Organization of the Hamster Cumulus Extracellular Matrix : A Hyaluronate-Glycoprotein Gel which Modulates Sperm Access to the Oocyte. *Development, Growth & Differentiation* 32, 353-365 (1990).
- Clarris, B.J. & Fraser, J.R. On the pericellular zone of some mammalian cells in vitro. *Exp Cell Res* 49, 181-193 (1968).
- Cleland, R.L. & Wang, J.L. Ionic polysaccharides. 3. Dilute solution properties of hyaluronic acid fractions. *Biopolymers* 9, 799-810 (1970).
- Cleland, R.L. Viscometry and sedimentation equilibrium of partially hydrolyzed hyaluronate : Comparison with theoretical models of wormlike chains. *Biopolymers* 23, 647-666 (1984).
- Cohen, M., Kam, Z., Addadi, L. & Geiger, B. Dynamic study of the transition from hyaluronan- to integrin-mediated adhesion in chondrocytes. *EMBO J* 25, 302-311 (2006).
- Cohen, M., Klein, E., Geiger, B. & Addadi, L. Organization and adhesive properties of the hyaluronan pericellular coat of chondrocytes and epithelial cells. *Biophys J* 85, 1996-2005 (2003).
- Constantinescu, A.A., Vink, H. & Spaan, J.A. Endothelial cell glycocalyx modulates immobilization of leukocytes at the endothelial surface. *Arterioscler Thromb Vasc Biol* 23, 1541-1547 (2003).
- Day, A.J. & de la Motte, C.A. Hyaluronan cross-linking : a protective mechanism in inflammation ? *Trends in Immunology* 26, 637-643 (2005).
- Day, A.J. & de la Motte, C.A. Hyaluronan cross-linking : a protective mechanism in inflammation ? *Trends Immunol* 26, 637-643 (2005).
- Day, A.J. & Prestwich, G.D. Hyaluronan-binding proteins : tying up the giant. *J Biol Chem* 277, 4585-4588 (2002).
- Day, A.J. & Sheehan, J.K. Hyaluronan : polysaccharide chaos to protein organisation. *Curr. Opin. Struct. Biol.* 11, 617-622 (2001).
- Day, A.J., Wright, A. J., Blanc, G., Konarev, P., Svergun, D. I., and Hulmes, D. J. S. . Small angle X-ray scattering reveals TSG-6 to be an end-to-end dimer in the presence of excess hyaluronan.

in HASYLAB DESY Annual Report 2004 (2004).

- de la Motte, C.A., Hascall, V.C., Drazba, J., Bandyopadhyay, S.K. & Strong, S.A. Mononuclear leukocytes bind to specific hyaluronan structures on colon mucosal smooth muscle cells treated with polyinosinic acid:polycytidylic acid : inter-alpha-trypsin inhibitor is crucial to structure and function. *Am J Pathol* 163, 121-133 (2003).
- Delpech, B., Bertrand, P. & Maingonnat, C. Immunoenzymoassay of the hyaluronic acid-hyaluronectin interaction : application to the detection of hyaluronic acid in serum of normal subjects and cancer patients. *Anal Biochem* 149, 555-565 (1985).
- Drahorad, J., Tesarik, J., Cechova, D. & Vilim, V. Proteins and glycosaminoglycans in the intercellular matrix of the human cumulus-oophorus and their effect on conversion of proacrosin to acrosin. *J Reprod Fertil* 93, 253-262 (1991).
- Enghild, J.J., et al. Organization of the inter-alpha-inhibitor heavy chains on the chondroitin sulfate originating from Ser(10) of bikunin : posttranslational modification of lalpal-derived bikunin. *Biochemistry* 38, 11804-11813 (1999).
- Enghild, J.J., Thogersen, I.B., Pizzo, S.V. & Salvesen, G. Analysis of inter-alpha-trypsin inhibitor and a novel trypsin inhibitor, pre-alpha-trypsin inhibitor, from human plasma. Polypeptide chain stoichiometry and assembly by glycan. *J Biol Chem* 264, 15975-15981 (1989).
- Evanko, S.P., Angello, J.C. & Wight, T.N. Formation of hyaluronan- and versican-rich pericellular matrix is required for proliferation and migration of vascular smooth muscle cells. *Arterioscler Thromb Vasc Biol* 19, 1004-1013 (1999).
- Evanko, S.P., Tammi, M.I., Tammi, R.H. & Wight, T.N. Hyaluronan-dependent pericellular matrix. *Adv Drug Deliv Rev* 59, 1351-1365 (2007).
- Familiari, G., Heyn, R., Relucenti, M., Nottola, S.A. & Sathananthan, A.H. Ultrastructural dynamics of human reproduction, from ovulation to fertilization and early embryo development. *Int Rev Cytol* 249, 53-141 (2006).
- Fazzini, F., et al. PTX3 in small-vessel vasculitides : an independent indicator of disease activity produced at sites of inflammation. *Arthritis Rheum* 44, 2841-2850 (2001).
- Fraser, J.R., Laurent, T.C. & Laurent, U.B. Hyaluronan : its nature, distribution, functions and turnover. *J Intern Med* 242, 27-33 (1997).
- Fulop, C., et al. Impaired cumulus mucification and female sterility in tumor necrosis factor-induced protein-6 deficient mice. *Development* 130, 2253-2261 (2003).
- Garlanda, C., Bottazzi, B., Bastone, A. & Mantovani, A. Pentraxins at the crossroads between innate immunity, inflammation, matrix deposition, and female fertility. *Annu Rev Immunol* 23, 337-366 (2005).
- Glant, T.T., et al. Cartilage-specific constitutive expression of TSG-6 protein (product of tumor necrosis factor alpha-stimulated gene 6) provides a chondroprotective, but not antiinflammatory, effect in antigen-induced arthritis. *Arthritis Rheum* 46, 2207-2218 (2002).
- Goodman, A.R., et al. Long pentraxins : an emerging group of proteins with diverse functions. *Cytokine Growth Factor Rev* 7, 191-202 (1996).
- Hamerman, D. & Sandson, J. Unusual Properties of Hyaluronateprotein Isolated from Pathological Synovial Fluids. *J Clin Invest* 42, 1882-1889 (1963).
- Hascall, V.C.L., T.C. Hyaluronan : Structure and Physical Properties. *Hyaluronan Today* (1997).
- Haxaire, K., Braccini, I., Milas, M., Rinaudo, M. & Perez, S. Conformational Behavior of Hyaluronan in Relation to its Physical Properties as Probed by Molecular Modeling, *Glycobiology*, 10, 587-594 (2000).
- Hedman, K., et al. Isolation of the pericellular matrix of human fibroblast cultures. *J Cell Biol* 81, 83-91 (1979).

- Hess, K.A., Chen, L. & Larsen, W.J. Inter-alpha-inhibitor binding to hyaluronan in the cumulus extracellular matrix is required for optimal ovulation and development of mouse oocytes. *Biol Reprod* 61, 436-443 (1999).
- Hess, K.A., Chen, L. & Larsen, W.J. The ovarian blood follicle barrier is both charge- and size-selective in mice. *Biol Reprod* 58, 705-711 (1998).
- Hong, S.J., et al. Establishment of a capillary-cumulus model to study the selection of sperm for fertilization by the cumulus oophorus. *Hum Reprod* 19, 1562-1569 (2004).
- Horwitz, A.R. & Parsons, J.T. Cell migration—movin' on. *Science* 286, 1102-1103 (1999).
- Ievoli, E., et al. Implication of the oligomeric state of the N-terminal PTX3 domain in cumulus matrix assembly. *Matrix Biol* 30, 330-337 (2011).
- Inforzato, A., et al. Structural characterization of PTX3 disulfide bond network and its multimeric status in cumulus matrix organization. *J Biol Chem* 283, 10147-10161 (2008).
- Inforzato, A., et al. Structure and function of the long pentraxin PTX3 glycosidic moiety : fine-tuning of the interaction with C1q and complement activation. *Biochemistry* 45, 11540-11551 (2006).
- Inforzato, A., et al. The angiogenic inhibitor long pentraxin PTX3 forms an asymmetric octamer with two binding sites for FGF2. *J Biol Chem* 285, 17681-17692 (2010).
- Itano, N., et al. Abnormal accumulation of hyaluronan matrix diminishes contact inhibition of cell growth and promotes cell migration. *Proc Natl Acad Sci U S A* 99, 3609-3614 (2002).
- Jessen, T.E. & Odum, L. Role of tumour necrosis factor stimulated gene 6 (TSG-6) in the coupling of inter-alpha-trypsin inhibitor to hyaluronan in human follicular fluid. *Reproduction* 125, 27-31 (2003).
- Jessen, T.E., Odum, L. & Johnsen, A.H. In vivo binding of human inter-alpha-trypsin inhibitor free heavy chains to hyaluronic acid. *Biol Chem Hoppe Seyler* 375, 521-526 (1994).
- Joester, D., Klein, E., Geiger, B. & Addadi, L. Temperature-sensitive micrometer-thick layers of hyaluronan grafted on microspheres. *J Am Chem Soc* 128, 1119-1124 (2006).
- Kasemo, B. Biological surface science. *Surface Science* 500, 656-677 (2002).
- Knudson, C.B. & Toole, B.P. Changes in the pericellular matrix during differentiation of limb bud mesoderm. *Dev Biol* 112, 308-318 (1985).
- Knudson, C.B. Hyaluronan receptor-directed assembly of chondrocyte pericellular matrix. *J Cell Biol* 120, 825-834 (1993).
- Kobayashi, H., Sun, G.W., Hirashima, Y. & Terao, T. Identification of link protein during follicle development and cumulus cell cultures in rats. *Endocrinology* 140, 3835-3842 (1999).
- Kohda, D., et al. Solution structure of the link module : a hyaluronan-binding domain involved in extracellular matrix stability and cell migration. *Cell* 86, 767-775 (1996). Image not found or type unknown
- Kultti, A., Rilla, K., Tiihonen, R., Spicer, A. P., Tammi, R. H., and Tammi, M. I. Hyaluronan synthesis induces microvillus-like cell surface protrusions. *The Journal of biological chemistry* 281, 15821-15828 (2006). Retour ligne automatique
- Kuznetsova, S.A., et al. TSG-6 binds via its CUB_C domain to the cell-binding domain of fibronectin and increases fibronectin matrix assembly. *Matrix Biol* 27, 201-210 (2008).
- Lam, X., Gieseke, C., Knoll, M. & Talbot, P. Assay and importance of adhesive interaction between hamster (*Mesocricetus auratus*) oocyte-cumulus complexes and the oviductal epithelium. *Biol Reprod* 62, 579-588 (2000).
- Laurent, T. The chemistry, biology and medical application of hyaluronan and its derivatives (Portland Pr, 1998).
- Leali, D., et al. Long pentraxin 3/tumor necrosis factor-stimulated gene-6 interaction : a biological

rheostat for fibroblast growth factor 2-mediated angiogenesis. *Arterioscler Thromb Vasc Biol* 32, 696-703 (2012).

- Lee, G.M., Johnstone, B., Jacobson, K. & Caterson, B. The dynamic structure of the pericellular matrix on living cells. *J Cell Biol* 123, 1899-1907 (1993).
- Lee, G.W., Lee, T.H. & Vilcek, J. TSG-14, a tumor necrosis factor- and IL-1-inducible protein, is a novel member of the pentaxin family of acute phase proteins. *J Immunol* 150, 1804-1812 (1993).
- Lee, T.H., Wisniewski, H.G. & Vilcek, J. A novel secretory tumor necrosis factor-inducible protein (TSG-6) is a member of the family of hyaluronate binding proteins, closely related to the adhesion receptor CD44. *J Cell Biol* 116, 545-557 (1992).
- Macri, L., Silverstein, D. & Clark, R.A. Growth factor binding to the pericellular matrix and its importance in tissue engineering. *Adv Drug Deliv Rev* 59, 1366-1381 (2007).
- Mahoney, D.J., et al. TSG-6 inhibits osteoclast activity via an autocrine mechanism and is functionally synergistic with osteoprotegerin. *Arthritis Rheum* 63, 1034-1043.
- Maier, R., Wisniewski, H.G., Vilcek, J. & Lotz, M. TSG-6 expression in human articular chondrocytes. Possible implications in joint inflammation and cartilage degradation. *Arthritis Rheum* 39, 552-559 (1996).
- McLane, L.T., et al. Spatial organization and mechanical properties of the pericellular matrix on chondrocytes. *Biophys J* 104, 986-996 (2013).
- Meyer, K., Palmer, J W. The polysaccharide of the vitreous humor. *J Biol Chem* 107, 629-634 (1934).
- Mindrescu, C., et al. Reduced susceptibility to collagen-induced arthritis in DBA/1J mice expressing the TSG-6 transgene. *Arthritis Rheum* 46, 2453-2464 (2002).
- Morra, M. Engineering of biomaterials surfaces by hyaluronan. *Biomacromolecules* 6, 1205-1223 (2005).
- Mukhopadhyay, D., Asari, A., Rugg, M.S., Day, A.J. & Fulop, C. Specificity of the tumor necrosis factor-induced protein 6-mediated heavy chain transfer from inter-alpha-trypsin inhibitor to hyaluronan : implications for the assembly of the cumulus extracellular matrix. *J Biol Chem* 279, 11119-11128 (2004).
- Mukhopadhyay, D., Hascall, V.C., Day, A.J., Salustri, A. & Fulop, C. Two distinct populations of tumor necrosis factor-stimulated gene-6 protein in the extracellular matrix of expanded mouse cumulus cell-oocyte complexes. *Arch Biochem Biophys* 394, 173-181 (2001).
- Ochsner, S.A., Russell, D.L., Day, A.J., Breyer, R.M. & Richards, J.S. Decreased expression of tumor necrosis factor-alpha-stimulated gene 6 in cumulus cells of the cyclooxygenase-2 and EP2 null mice. *Endocrinology* 144, 1008-1019 (2003).
- Picart, C., et al. Molecular basis for the explanation of the exponential growth of polyelectrolyte multilayers. *Proc Natl Acad Sci U S A* 99, 12531-12535 (2002).
- Potempa, J., Kwon, K., Chawla, R. & Travis, J. Inter-alpha-trypsin inhibitor. Inhibition spectrum of native and derived forms. *J Biol Chem* 264, 15109-15114 (1989).
- Powers, R.W., Chen, L., Russell, P.T. & Larsen, W.J. Gonadotropin-stimulated regulation of blood-follicle barrier is mediated by nitric oxide. *Am J Physiol* 269, E290-298 (1995).
- Pratt, C.W. & Pizzo, S.V. In vivo metabolism of inter-alpha-trypsin inhibitor and its proteinase complexes : evidence for proteinase transfer to alpha 2-macroglobulin and alpha 1-proteinase inhibitor. *Arch Biochem Biophys* 248, 587-596 (1986).
- Presta, M., Camozzi, M., Salvatori, G. & Rusnati, M. Role of the soluble pattern recognition receptor PTX3 in vascular biology. *J Cell Mol Med* 11, 723-738 (2007).
- Reviakine, I., Johannsmann, D. & Richter, R.P. Hearing what you cannot see and visualizing what you hear : interpreting quartz crystal microbalance data from solvated interfaces. *Anal*

Chem 83, 8838-8848 (2011).

- Ricciardelli, C., et al. Formation of hyaluronan- and versican-rich pericellular matrix by prostate cancer cells promotes cell motility. *J Biol Chem* 282, 10814-10825 (2007).
- Richter, R.P., et al. Membrane-grafted hyaluronan films : A well-defined model system of glycoconjugate cell coats. *Journal of the American Chemical Society* 129, 5306-+ (2007).
- Rilla, K., Tiihonen, R., Kultti, A., Tammi, M. & Tammi, R. Pericellular hyaluronan coat visualized in live cells with a fluorescent probe is scaffolded by plasma membrane protrusions. *J Histochem Cytochem* 56, 901-910 (2008).
- Rodgers, R.J. & Irving-Rodgers, H.F. Formation of the ovarian follicular antrum and follicular fluid. *Biol Reprod* 82, 1021-1029.
- Rugg, M.S., et al. Characterization of Complexes Formed between TSG-6 and Inter- α -inhibitor That Act as Intermediates in the Covalent Transfer of Heavy Chains onto Hyaluronan. *Journal of Biological Chemistry* 27, 25674-25686 (2005).
- Russell, D.L. & Salustri, A. Extracellular matrix of the cumulus-oocyte complex. *Semin Reprod Med* 24, 217-227 (2006).
- Russell, D.L., Ochsner, S.A., Hsieh, M., Mulders, S. & Richards, J.S. Hormone-regulated expression and localization of versican in the rodent ovary. *Endocrinology* 144, 1020-1031 (2003).
- Sabri, S., et al. Glycocalyx modulation is a physiological means of regulating cell adhesion. *J Cell Sci* 113 (Pt 9), 1589-1600 (2000).
- Salier, J.P., Rouet, P., Raguenez, G. & Daveau, M. The inter- α -inhibitor family : from structure to regulation. *Biochem J* 315 (Pt 1), 1-9 (1996).
- Salustri A. , F.C. Role of Hyaluronan during Ovulation and Fertilization. (1998).
- Salustri, A., et al. PTX3 plays a key role in the organization of the cumulus oophorus extracellular matrix and in in vivo fertilization. *Development* 131, 1577-1586 (2004).
- Salustri, A., Yanagishita, M. & Hascall, V.C. Synthesis and accumulation of hyaluronic acid and proteoglycans in the mouse cumulus cell-oocyte complex during follicle-stimulating hormone-induced mucification. *J Biol Chem* 264, 13840-13847 (1989).
- Sanggaard, K.W., Karring, H., Valnickova, Z., Thogersen, I.B. & Enghild, J.J. The TSG-6 and I α I interaction promotes a transesterification cleaving the protein-glycosaminoglycan-protein (PGP) cross-link. *J Biol Chem* 280, 11936-11942 (2005).
- Sato, H., et al. Impaired fertility in female mice lacking urinary trypsin inhibitor. *Biochem Biophys Res Commun* 281, 1154-1160 (2001).
- Scarchilli, L., et al. PTX3 interacts with inter- α -trypsin inhibitor : implications for hyaluronan organization and cumulus oophorus expansion. *J Biol Chem* 282, 30161-30170 (2007).
- Sengupta, K., et al. Mimicking Tissue Surfaces by Supported Membrane Coupled Ultrathin Layer of Hyaluronic Acid. *Langmuir* 19, 1775-1781 (2003).
- Sheehan, J.K. & Atkins, E.D.T. X-ray fibre diffraction study of conformational changes in hyaluronate induced in the presence of sodium, potassium and calcium cations. *International Journal of Biological Macromolecules* 5, 215-221 (1983).
- Siegelman, M.H., DeGrendele, H.C. & Estess, P. Activation and interaction of CD44 and hyaluronan in immunological systems. *J Leukoc Biol* 66, 315-321 (1999).
- Smith, M.L., Long, D.S., Damiano, E.R. & Ley, K. Near-wall micro-PIV reveals a hydrodynamically relevant endothelial surface layer in venules in vivo. *Biophys J* 85, 637-645 (2003).
- Steinbuch, M. The inter- α -trypsin inhibitor. *Methods Enzymol* 45, 760-772 (1976).
- Sugiki, M., Sumi, H., Maruyama, M., Yoshida, E. & Mihara, H. Clearance and distribution of acid-stable trypsin inhibitor (ASTI). *Enzyme* 42, 31-38 (1989).

-
- Szanto, S., Bardos, T., Gal, I., Glant, T.T. & Mikecz, K. Enhanced neutrophil extravasation and rapid progression of proteoglycan-induced arthritis in TSG-6-knockout mice. *Arthritis Rheum* 50, 3012-3022 (2004).
 - Takahashi, R., Kubota, K., Kawada, M. & Okamoto, A. Effect of molecular weight distribution on the solution properties of sodium hyaluronate in 0.2M NaCl solution. *Biopolymers* 50, 87-98 (1999).
 - Talbot, P., Shur, B.D. & Myles, D.G. Cell adhesion and fertilization : steps in oocyte transport, sperm-zona pellucida interactions, and sperm-egg fusion. *Biol Reprod* 68, 1-9 (2003).
 - Tammi, M.I., Day, A.J. & Turley, E.A. Hyaluronan and homeostasis : a balancing act. *J Biol Chem* 277, 4581-4584 (2002).
 - Tesarik, J., Pilka, L., Drahorad, J., Cechova, D. & Veselsky, L. The role of cumulus cell-secreted proteins in the development of human sperm fertilizing ability : implication in IVF. *Hum Reprod* 3, 129-132 (1988).
 - Toole, B.P. Hyaluronan in morphogenesis. *Semin Cell Dev Biol* 12, 79-87 (2001).
 - Toole, B.P. Hyaluronan : from extracellular glue to pericellular cue. *Nat Rev Cancer* 4, 528-539 (2004).
 - Varani, S., et al. Knockout of pentraxin 3, a downstream target of growth differentiation factor-9, causes female subfertility. *Mol Endocrinol* 16, 1154-1167 (2002).
 - Weissmann, B.M., K. . The structure of hyalobiuronic acid and of hyaluronic acid from umbilical cord. *J. Am. Chem. Soc.* 76, 1753-1757 (1954).
 - Wisniewski, H.G., Burgess, W.H., Oppenheim, J.D. & Vilcek, J. TSG-6, an arthritis-associated hyaluronan binding protein, forms a stable complex with the serum protein inter-alpha-inhibitor. *Biochemistry* 33, 7423-7429 (1994).
 - Wisniewski, H.G., et al. TSG-6 : a TNF-, IL-1-, and LPS-inducible secreted glycoprotein associated with arthritis. *J Immunol* 151, 6593-6601 (1993).
 - Wolny, P.M., et al. Analysis of CD44-hyaluronan interactions in an artificial membrane system : insights into the distinct binding properties of high and low molecular weight hyaluronan. *J Biol Chem* 285, 30170-30180.
 - Wolny, P.M., Spatz, J.P. & Richter, R.P. On the adsorption behavior of biotin-binding proteins on gold and silica. *Langmuir* 26, 1029-1034 (2010).
 - Yingsung, W., et al. Molecular heterogeneity of the SHAP-hyaluronan complex. Isolation and characterization of the complex in synovial fluid from patients with rheumatoid arthritis. *J Biol Chem* 278, 32710-32718 (2003).
 - Zhao, M., et al. Evidence for the covalent binding of SHAP, heavy chains of inter-alpha-trypsin inhibitor, to hyaluronan. *J Biol Chem* 270, 26657-26663 (1995).
 - Zhuo, L., et al. Defect in SHAP-hyaluronan complex causes severe female infertility. A study by inactivation of the bikunin gene in mice. *J Biol Chem* 276, 7693-7696 (2001).

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