



UPPSALA
UNIVERSITET

Molecular Biotechnology Programme
Uppsala University School of Engineering

UPTEC X 14 022	Date of issue 2014-08	
Author Maya Salomonsson		
Title (English) Exploring innate type B cells in an animal model for autoimmune arthritis		
Title (Swedish)		
Abstract B cells have a central role in the pathogenesis of collagen-induced arthritis (CIA), an animal model of the autoimmune disease rheumatoid arthritis. In this report, a specific subset of an innate type of B cells, B-1 B cells, have been studied for the involvement in CIA. The B-1 B cells were shown to produce small amounts of collagen-specific antibodies upon stimulation in vitro, suggesting that they play a minor role in the development of CIA. This report also includes how marginal zone B cells, another innate type of B cells with natural collagen-reactivity, can be identified in the medullary sinuses of lymph nodes of collagen-immunized mice, implying involvement in auto antigen trapping.		
Keywords Rheumatoid arthritis, collagen-induced arthritis, B-1 B cells, MZB, MZBL, antibodies, polyreactive antibodies, collagen-specific antibodies, MACS, FACS, ELISA, ELISPOT, IHC.		
Supervisor Sandra Kleinau, Uppsala universitet		
Scientific reviewer Lars Hellman, Uppsala universitet		
Project name	Sponsors	
Language English	Security	
ISSN 1401-2138	Classification	
Supplementary bibliographical information	Pages 28	
Biology Education Centre Box 592 S-75124 Uppsala	Biomedical Center Tel +46 (0)18 4710000	Husargatan 3 Uppsala Fax +46 (0)18 471 4687