

## Evaluation of Humoral Immune Response Against Somatic and Excretory-Secretory Antigens of *Dicrocoelium dendriticum* in Infected Sheep by Western Blot

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**Abstract :** The aim of this study was the isolation and identification of excretory-secretory and somatic antigens from *D. dendriticum* by SDS-PAGE and evaluation of humeral immune response against these antigens. The sera of infected sheep with different infection degrees were collected. Somatic and ES proteins were isolated with SDS PAGE. Immunogenicity properties of the resulting proteins were determined using western blot analysis. The total extract of somatic antigens analysed by SDS-PAGE revealed 21 proteins. In mild infection, bands of 130 KDa were immune dominant. In moderate infections 48, 80 and 130 KDa and in heavy infections 48, 60, 80, 130 KDa were detected as immune dominant bands. In ES antigens, mild infection 130 KDa, in moderate infection 100, 120 and 130 KDa and in heavy infection 45, 80, 85, 100, 120 and 130 KDa were immune dominant bands. The most immunogenic protein band during different degrees of infection was 130KDa.

**Keywords :** *Dicrocoelium dendriticum* excretory-secretory antigens, somatic antigens, western blot

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