USING THE SPOT-SYNTHESIS TECHNIQUE TO CHARACTERIZE SmZF1, A SCHISTOSOMA MANSONI PUTATIVE TRANSCRIPTION FACTOR Drummond, M.G.<sup>1</sup>, Machado de Ávila, R.A.<sup>1</sup>, Calzavara-Silva, C.E.<sup>2</sup>, Granier, C.<sup>3</sup>, Chavez-Olortegui, C.<sup>1</sup>, Franco, G.R.<sup>1</sup>

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SPOT-synthesis is a technique used to synthesize peptides directly in a cellulose membrane. Peptide arrays produced by this method are widely used to investigate a range of molecular interactions. SmZF1 has been characterized by our group as being a putative zinc finger transcription factor in *S. mansoni*. An array of 76 pentadecapeptides frameshifted by two residues covering the complete amino acid sequence of SmZF1 was firstly used to identify the amino acid residues responsible for the DNA binding ability of SmZF1 and indicated the  $\alpha$ -helix of the C-terminal zinc finger motif as the crucial region involved in this interaction, in accordance with regions commonly used by other zinc finger proteins in this interaction. Also, the peptide array was used in an epitope mapping of SmZF1, and identified part of the midst zinc finger motif as preferential for the antibody recognition. The peptide representing this region was synthesized using the F-moc strategy, its antigenicity was confirmed and it is now being used to produce a good quality anti-SmZF1 antibody.

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