## Establishment of monoclonal antibodies against the polar tube of Encephalitozoon cuniculi and identification of the corresponding antigenic polypeptide through proteome analysis

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We established three hybridomas able to produce monoclonal antibodies (MAbs) against the polar tube (PT) of *Encephalitozoon cuniculi*. The reactivity of two out of the three MAbs was examined in this study. Immunoreactive proteins specifically recognized by the MAbs were analyzed using immunoproteomics. Both MAbs exhibited positive reactions to similar multispots on 2-DE blots. Strongly positive signals were obtained from two Coomassie blue-stainable consecutive spots of identical Mr but different pI. These spots were identified as acidic protein PTP1.