Dear editor:

Anaplasma marginale is an obligate intraerythrocytic rickettsial pathogen (order, Rickettsiales: family, Anaplasmataceae) that causes bovine anaplasmosis. This disease is widely distributed in tropical and subtropical regions of the world and causes important economic losses to cattle production. Major surface protein (MSP) 5 (msp5 gene) is one of the six MSPs identified on A. marginale from cattle. This protein is present in A. ovis, A. centrale and all A. marginale isolates studied and has potential for use in improved diagnostic assays.

The analysis and comparison of the sequence of msp5 gene of Anaplasma marginale Havana isolate (Access Number AAS18265) allowed to know that it has 98,42% homology with the sequence described for the Florida isolate (Access Number M93392). This difference is given by base changes that do not cause changes in the deduced sequence of amino acids, showing a 99,04 % homology. The Brazilian isolate (Access Number AY245428) and A. centrale strain (Access Number AY054384) showed 96,68% and 87,46% similarity in the nucleotide sequence and 97,14% and 92,85% with respect to the protein sequence, which is representative of the msp5 gene and MSP5 protein sequence conservation. These results confirmed the importance of MSP5 as a suitable antigen for the serological diagnosis of bovine anaplasmosis.

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