

**MOLECULER CHARACTERIZATION OF GENE CODING OMP 2a  
*Brucella abortus* LOCAL ISOLATE**

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**ABSTRACT**

This study was aimed to know characterization of gene coding OMP 2a *B. abortus* local isolate through nucleotide analysis by PCR and sequencing, to analyze the homology *B. abortus* local isolate and isolate from another country including *B. abortus* isolate strain 19, and to know the profile of outer membrane protei with SDS PAGE method.

The sample bacteriae were isolated from infected cattle from Sulawesi and NTT. The presence of omp2a genes which are common to all *Brucella abortus* samples can be confirmed and amplified using *Illustra™ PureTaq Ready-To-Go-PCR Beads* from Invitrogen with one pairs of specifically-designed primers. The product was purified using *QIAquick spin column* from Qiagen and sequenced using *Abi Prism 310 Genetic Analyser– Applied Biosystems* to get the omp2a gene nucleotide data.

The result of this study showed that the isolates have a high homology of omp2a gene with another bacteriae isolate from some country and *B.abortus* isolate strain 19. The result of SDS PAGE is band protein with moleculer weight from Sulawesi were 98 kDa, 86 kDa, 69 kDa, 47 kDa, 43 kDa, 36 kDa, and from NTT were 98 kDa, 86 kDa, 65 kDa , 47 kDa , 43 kDa , 36 kDa.

**Keywords** : *Brucella abortus*, outer membrane protein, omp 2a, moleculer characterization

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