## **Accepted Manuscript**

Three polypeptides screened from phage display random peptide library may be the receptor polypeptide of *Mycoplasma genitalium* adhesion protein

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PII: S0882-4010(17)31645-5

DOI: 10.1016/j.micpath.2018.04.058

Reference: YMPAT 2937

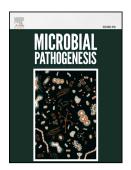
To appear in: Microbial Pathogenesis

Received Date: 2 December 2017

Revised Date: 17 March 2018 Accepted Date: 26 April 2018

Please cite this article as: Deng X, Zhu Y, Dai P, Yu M, Chen L, Zhu C, You X, Li L, Zeng Y, Three polypeptides screened from phage display random peptide library may be the receptor polypeptide of *Mycoplasma genitalium* adhesion protein, *Microbial Pathogenesis* (2018), doi: 10.1016/j.micpath.2018.04.058.

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## ACCEPTED MANUSCRIPT

- 1 Three polypeptides screened from phage display
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- 4 protein
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- 14 **Abstract:** Mycoplasma genitalium adhesion protein (MgPa) is a major adhesin of M.
- 15 *genitalium*, a human pathogen associated with a series of genitourinary tract diseases.
- 16 MgPa plays a very important role in M. genitalium adhering to the host cells.
- 17 However, the exact receptor peptides or proteins of MgPa are still poorly understood
- 18 so far. Three polypeptides (V-H-W-D-F-R-Q-W-W-Q-P-S), (D-W-S-S-W-V
- 19 -Y-R-D-P-Q-T) and (H-Y-I-D-F-R-W) were previously screened from a phage display
- 20 random peptide library using recombinant MgPa (rMgPa) as a target molecule. In this
- 21 study, three polypeptides were artificially synthesized and investigated as to whether
- 22 they are potential receptors of MgPa. We found that rMgPa specifically bound to three

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