

# **Novel Genetic Variants in *PATL2* Corresponding to Different Clinical Phenotypes of Female Infertility**

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**Table S1** List of genes examined

| Gene           | Phenotype                                      | Inheritance* |
|----------------|------------------------------------------------|--------------|
| <b>PADI6</b>   | Oocyte/Zygote/Embryo Maturation Arrest Type 16 | AR           |
| <b>CDC20</b>   | Oocyte/Zygote/Embryo Maturation Arrest Type 14 | AR           |
| <b>ZFP36L2</b> | Oocyte/Zygote/Embryo Maturation Arrest Type 13 | AR           |
| <b>ASTL</b>    | Oocyte/Zygote/Embryo Maturation Arrest Type 11 | AR           |
| <b>TRIP13</b>  | Oocyte/Zygote/Embryo Maturation Arrest Type 9  | AR           |
| <b>ZP3</b>     | Oocyte/Zygote/Embryo Maturation Arrest Type 3  | AD           |
| <b>KPNA7</b>   | Oocyte/Zygote/Embryo Maturation Arrest Type 17 | AR           |
| <b>WEE2</b>    | Oocyte/Zygote/Embryo Maturation Arrest Type 5  | AR           |
| <b>MOS</b>     | Oocyte/Zygote/Embryo Maturation Arrest Type 20 | AR           |
| <b>FBXO43</b>  | Oocyte/Zygote/Embryo Maturation Arrest Type 12 | AR           |
| <b>TUBB8</b>   | Oocyte/Zygote/Embryo Maturation Arrest Type 2  | AD/AR        |
| <b>ZP1</b>     | Oocyte/Zygote/Embryo Maturation Arrest Type 1  | AR           |
| <b>PANX1</b>   | Oocyte/Zygote/Embryo Maturation Arrest Type 7  | AD           |
| <b>BTG4</b>    | Oocyte/Zygote/Embryo Maturation Arrest Type 8  | AR           |
| <b>CHEK1</b>   | Oocyte/Zygote/Embryo Maturation Arrest Type 21 | AD           |
| <b>PATL2</b>   | Oocyte/Zygote/Embryo Maturation Arrest Type 4  | AR           |
| <b>REC114</b>  | Oocyte/Zygote/Embryo Maturation Arrest Type 10 | AR           |
| <b>ZP2</b>     | Oocyte/Zygote/Embryo Maturation Arrest Type 6  | AR           |
| <b>TLE6</b>    | Oocyte/Zygote/Embryo Maturation Arrest Type 15 | AR           |
| <b>NLRP2</b>   | Oocyte/Zygote/Embryo Maturation Arrest Type 18 | AR           |
| <b>NLRP5</b>   | Oocyte/Zygote/Embryo Maturation Arrest Type 19 | AR           |
| <b>PABPC1L</b> | Oocyte/Zygote/Embryo Maturation Arrest Type 22 | AR           |

\* AD: autosomal dominant, AR: autosomal recessive.

**Table S2** PATL2 variants stability predicted by online server.

| $\Delta\Delta G$ (kcal/mol) | R280Q  | D293Y | I458T  |
|-----------------------------|--------|-------|--------|
| mCSM                        | -0.003 | 0.028 | -3.004 |
| SDM                         | -0.65  | -0.13 | -2.69  |
| DUET                        | 0.02   | 0.02  | -3.236 |