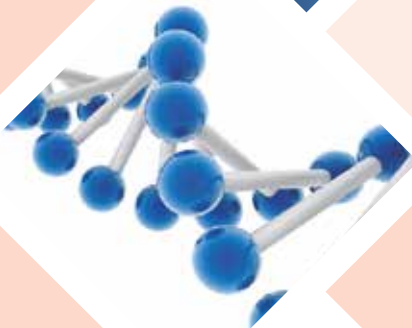


Test for **atypical Hemolytic Uremic Syndrome (aHUS)**



Test to assist the diagnostic and treatment of aHUS

Secugen offers a test that combines the search of mutations in candidate genes and the genotyping for aHUS genetic risk and protection polymorphism, with an analysis that evaluates the levels and activity of the complement proteins. All of this is carried out with accuracy and with the highest quality standards.

What is atypical Hemolytic Uremic Syndrome (aHUS)?

It is an ultra-rare genetic thrombotic microangiopathy mainly affecting the kidneys. The majority of aHUS patients presents recurrent disease and more than 50% develops chronic kidney disease.

The aHUS is fundamentally associated with mutations and SNPs (single nucleotide polymorphisms) in genes encoding proteins of the complement system such as *CFH*, *MCP (CD46)*, *CFI*, *CFB*, *C3*, among others.

What is included in the test of aHUS performed by SECUGEN?

GENETIC STUDY

- Next Generation sequencing panel for *CFH*, *CFI*, *MCP (CD46)*, *CFB*, *C3*, *THBD*, *DGKE*, *CFP*, *CFHR1*, *CFHR2*, *CFHR3*, *CFHR4*, *CFHR5* and *ADAMTS13* genes.
- Analysis of rearrangements in *CFH/CFHR1-5* region.
- Genotyping of risk/protection haplotypes for *CFH* and *MCP (CD46)* genes.
- Comparison with proprietary database.

BIOCHEMISTRY AND FUNCTIONAL STUDY

- ELISA quantification. Nephelometry of factor H, factor I and factor B levels.
- Flow cytometry quantification of *MCP (CD46)*, *DAF*.
- Factor H functional analysis.
- Search for anti-FH autoantibodies.

Additionally we offer **Sanger sequencing** for *CFH*, *CFI*, *MCP (CD46)*, *CFB*, *C3*, *THBD*, *DGKE*, *CFP* and *ADAMTS13* genes.

Advantages of this study

- Provides prognostic value of aHUS evolution.
- Assists therapeutic and management discussions.
- Helps selection of live related donors.
- Eases genetic counseling and risk assessment in relatives.

Secugen gets advice and support from the Work Group in Complement and Renal Pathology, an international reference in complement's studies, coordinated by Drs. Rodríguez de Córdoba, López-Trascasa and Sánchez-Corral Gómez.

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