Affinitymap™ IMMUNOLOGICAL COMPATIBILITY

🔅 eurofins

Genoma

The embryo inherits half of its genetic material from the father and half from the mother, so **maternal-fetal immunological compatibility** can be predicted by studying the couple and, in the case of heterologous fertilization, the donor(s).

Certain maternal immune cells located in utero, called **Natural Killer** (NK) cells, mediate compatibility by recognizing **HLA-C** proteins present on the surface of the embryo through their KIR receptors.

HLA proteins are part of the Major Histocompatibility Complex (MHC) and help the immune system distinguish between self and non-self molecules.

Affinitymap test the ability of the maternal immune system to tolerate the embryo.

Maternal KIR genotype	FETAL HLA-C		
	C1/C1	C1/C2	C2/C2
AA	neutral	at risk*	at risk
AB/BB	neutral	neutral	neutral

*The risk is increased if the HLA-C2 allele is of paternal origin.

If the embryo has inherited at least one HLA-C2 allele of paternal origin and the maternal genotype is KIR AA, there will be an increased risk of recurrent miscarriage, preeclampsia, or growth retardation.

It is indicated for:

- Patients with a clinical history of multiple miscarriages and/or repeated implantation failure
- Patients with prior history or at risk for preeclampsia
- Selecting HLA-C compatible sperm donors
- Selecting HLA-compatible egg donors

Who should be tested





Advantages of the analysis:

- Verifies maternal-fetal compatibility.
- Identifies causes of recurrent abortions related to immunologic incompatibility.
- Recommends individualized monitoring in patients with implantation failures of immunologic aetiology.

Our test:

Affinitymap HLA-C

Genotyping of HLA-C allelic series.

Affinitymap KIR

Genotyping of allelic series of 16 KIR genes.

Affinitymap KIR & HLA-C

Genotyping of the allelic series of HLA-C and the 16 KIR genes.

Sample type: blood sample TAT: 15 working days



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