



## Biomarker Qualification Sheet

### Qualified Imperacer® Assay for the Quantification of TNF alpha (TNF $\alpha$ ) in Human Plasma

#### **TNF alpha (TNF $\alpha$ ):**

The tumor necrosis factor (TNF $\alpha$ ) is a pro-inflammatory cytokine of 17 kDa (157 amino acids) and involved in several signaling pathways. Released by macrophages, but also T cells and monocytes, TNF $\alpha$  mediates immune responses, inflammation, fever, apoptosis, cell proliferation and sepsis. Thus, it is associated with diseases like cancer, Crohn's disease and rheumatoid arthritis.

*Table 1: Assay setup*

<b>Analyte:</b>	TNF alpha (TNF $\alpha$ )
<b>Platform:</b>	Imperacer® (Immuno-PCR)
<b>Matrix:</b>	Human plasma
<b>Status:</b>	Qualified

*Table 2: Assay details*

<b>Lower limit of quantification:</b>	1.17 pg/ml
<b>Upper limit of quantification:</b>	150 pg/ml
<b>Assay range:</b>	1.17 – 150 pg/ml
<b>Minimum required dilution:</b>	1:2.3
<b>Minimum sample volume:</b>	30 $\mu$ l