- adding an anti-(ox)MIF antibody to be determined to a second part of the device, which is configured to be in a connection with the first part of the device which allows cell migration and diffusion, and
- calculating inhibition of migration, and
- wherein no (ox) MIF is added to the device.

In one embodimentaspect, there is provided an assay kit for determining the potency of anti-(ox)MIF-antibodies, comprising all reagents necessary to carry out the assay method as defined herein, preferably

- cells which express MIF
- antibody dilution buffer (e.g. glycine buffer)
- migration medium, and/or
- Two chamber cell migration system, wherein the kit comprises no (ox)MIF.

In one embodiment, there is provided a pharmaceutical or diagnostic composition, comprising anti-(ox)MIF antibodies, wherein the anti-(ox)MIF antibodies are characterized in that they have undergone a potency determination, as defined herein.

"Potency" in this context is a measure of drug activity expressed in terms of the amount required to produce an effect of given intensity. It is preferably expressed as an IC_{50} value (half maximal inhibition).

The assay of the present disclosure is based on the principle of inhibiting autocrine chemotactic actions of (ox)MIF and thereby inhibiting migration of cells which express MIF, in particular oxMIF, preferably on their surface, e.g. certain monocytic cells, like U937 monocytic cells. The cells of the present disclosure can express MIF endogenously or can be manipulated to recombinantly express MIF. The MIF needs to be expressed as oxMIF/converted to oxMIF. In a preferred embodiment the oxMIF is expressed on the surface of the cells, though this is not necessarily a key feature of this disclosure.

The present assay is to be differentiated from a typical chemotaxis assay (as referred to in scientific literature) which is based on a directed migration of cells towards a chemoattractant gradient. This chemoattractant gradient according to the prior art would have been (ox)MIF, added to the device in addition to the cells. The present inventors could surprisingly show that it is possible to provide an assay using cells which express MIF and that it was thus possible to provide an assay without addition of a further chemoattractant, i.e. without addition of (ox) MIF. These findings were particularly advantageous as the resultant assay is ox-MIF-diffusion independent, i.e. diffusion over time will not interfere with the results, and thus the assay is not as time-sensitive as prior art assays. Anti-(ox)MIF antibodies are capable of inhibiting the pro-migratory (ox)MIF functions on cells expressing (ox)MIF, thereby inhibiting random cell migration ("chemokinesis") (rather than inhibiting cell chemotaxis as referred to in scientific literature).

The present disclosure is also further explained by the attached figures.

Figure 1: General set-up of the present assay method.

Figure 2: FACS data of oxMIF on U937 monocytic cells

Figure 3: Exemplary figure showing two migration inhibition curves of U937 (human monocytes) and NR8383 (rat macrophages) towards different concentrations of RAM9 (anti-oxMIF antibody; logarithmic scale). FACS plot shows the binding of RAM9 to the cellular surface of these cells (black line; thin line: isotype control antibody)

information about the potency of the tested antibody can be obtained, preferably by calculating the half-maximal inhibiting antibody concentration (IC_{50}-value).

11. Assay method according to any one of the preceding claims, wherein the cells undergo from 10 to 48 h, preferably 8-16, preferably 10-12 h serum starvation before they are used in the assay.

~~12. Assay kit for determining the potency of anti-(ox)MIF-antibodies, comprising all reagents necessary to carry out the assay method of any one or more of the preceding claims, preferably~~

- ~~cells which express MIF~~
- ~~antibody dilution buffer (e.g. glycine buffer)~~
- ~~migration medium, and/or~~
- ~~Two chamber cell migration system, wherein the kit comprises no (ox)MIF.~~