

# OECD 487: *In vitro* MNT

The *in vitro* micronucleus test (MNT) is a **main-stay of most regulatory genotoxicity testing strategies**, and is used to **detect clastogens and aneugens**. In this regard it **complements the Ames test well**, as between the two study types they **detect all three major classes of genotoxin**. Fluorescence In Situ Hybridisation (FISH) can also be incorporated into the study design, to **enable differentiation** between predominantly clastogenic and aneugenic modes of action for micronucleus inducing test items.

We have been conducting **GLP *in vitro* MNT studies since 2014**, in both **isolated human lymphocytes** and in **TK6 cells**. We have a **highly experienced team of scientists** that have been running, scoring and study directing this assay type **for many years**.

<b>Test systems</b>	TK6 cells, or isolated human lymphocytes
<b>OECD guideline</b>	487
<b>Metabolic activation</b>	Typically induced rat liver S9, though other sources are available
<b>Fluorescence In Situ Hybridisation (FISH) inclusion</b>	Available in TK6 cells
<b>Test Format</b>	3 hr +/- S9, and extended exposure -S9 Fluorescence microscopy pan-centromeric FISH probes, enable centromeric staining and analysis.
<b>Typical test item requirements</b>	1-1.5 g
<b>Formulation Analysis</b>	Available upon request
<b>Endpoint</b>	Numerical and structural chromosomal damage

Utilise this test for your toxicology screening needs and talk to our Tox Team at **+44(0) 1625 238700** or email at **info@gentronix.co.uk**