



- Bicarbonate buffered
- Ready to use
- For investigation of fertilization failure (deficient oocyte activation)
- Contains Ca^{2+} -Ionophore A23187
- A Certificate of Analysis for each batch is available at hamiltonthorne.com

GM508 CultActive Intended Use

GM508 CultActive is a bicarbonate buffered, HSA free reagent designed to investigate oocytes of patients with failed fertilization after previous intracytoplasmic sperm injection (ICSI) cycles.

GM508 CultActive is designed to investigate if fertilization failure after previous ICSI cycles is due to deficient oocyte activation.

*GM508 CultActive is for non-clinical, research use only in USA.

GM508 CultActive Instructions for Use

- Prior to use, both GM508 CultActive and culture media (i.e., GM501 Cult) must be equilibrated for 4 hours in vial not firmly closed at 5 - 7% CO_2 and 37°C prior to use.
- Any laboratory procedures described herein are recommendations only. Each laboratory must establish and validate its own procedures for preparation and use.
- See reverse side for recommended application.

GM508 CultActive Composition

- NaCl, KCl, KH_2PO_4 , MgSO_4 , CaCl_2
- Bicarbonate, EDTA
- Glucose, Lactate, Pyruvate
- Non-essential and essential Amino Acids, Alanyl-Glutamine
- Ca^{2+} -Ionophore A23187, DMSO

GM508 CultActive Specifications

pH (at 37°C, 6% CO_2)	7.00 - 7.60
Osmolality (mOsm/kg)	400 - 460
Sterility (sterile/SAL 10^{-3})	No Growth
Endotoxins (LAL, EU/ml)	< 0.25
1-cell MEA	≥ 80% blastocysts at 96h after 1h exposure to GM508 CultActive

Part #	Size	Storage	Shelf life*
4 GM 508CULT-active1	1 x 1 ml	2 - 8°C	6 months

*From the date of manufacture

GM508 CultActive References

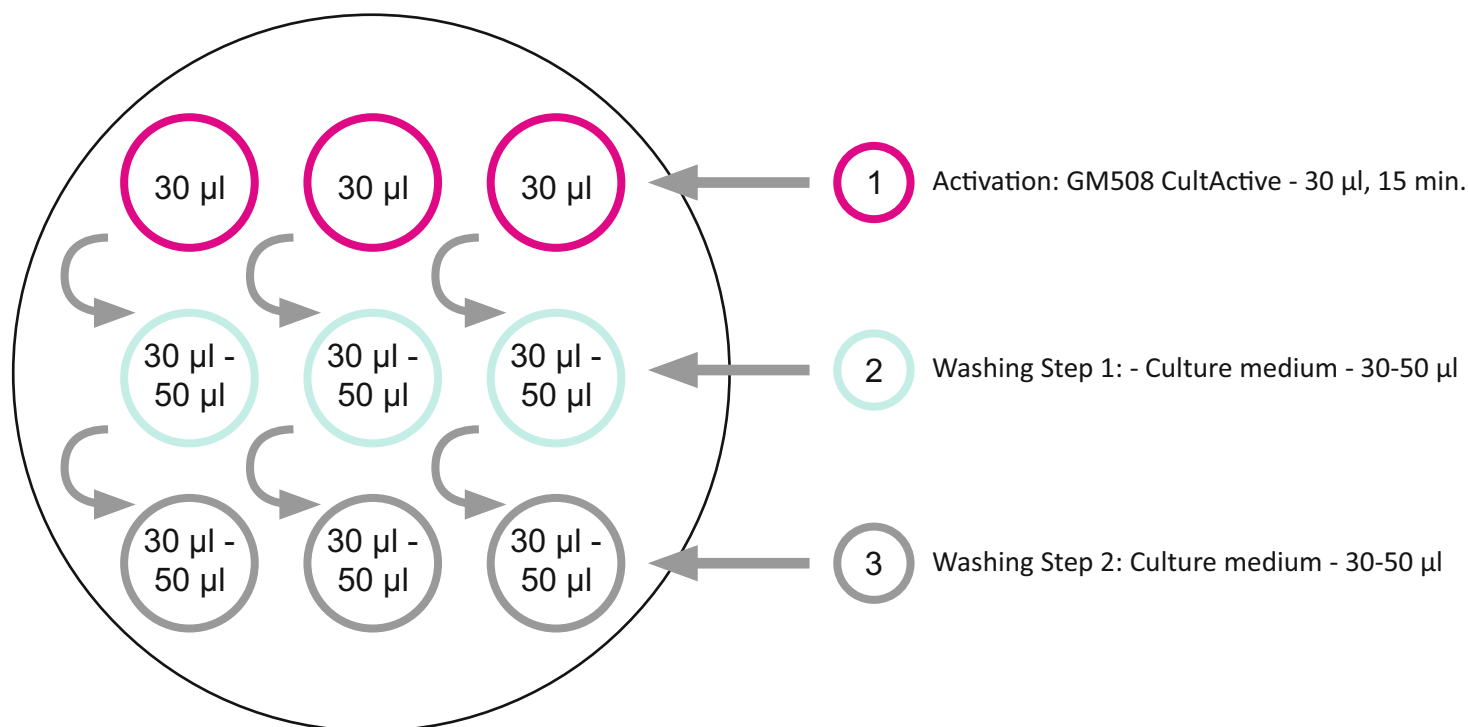
Murugesu S, Saso S, Jones BP, et al. Does the use of calcium ionophore during artificial oocyte activation demonstrate an effect on pregnancy rate? A meta-analysis. *Fertil Steril*. 2017;108(3):468-482.e3. doi:10.1016/j.fertnstert.2017.06.029

Ebner T, Montag M; Oocyte Activation Study Group, et al. Live birth after artificial oocyte activation using a ready-to-use ionophore: a prospective multicentre study. *Reprod Biomed Online*. 2015;30(4):359-365. doi:10.1016/j.rbmo.2014.11.012

GM508 CultActive Recommended Application

1. Prior to use, both **GM508 CultActive** and culture medium (i.e. GM501 Cult) must be equilibrated for 4 hours at 5-7% CO₂ and 37°C.
2. Prior to equilibrating, remove vial stopper and loosely replace to allow vial to vent.
3. Shake **GM508 CultActive** for approximately 30 seconds immediately prior to use.
4. For each oocyte, prepare 1 drop (30 µl) **GM508 CultActive** (#1 in diagram below) and 2 drops (30-50 µl) MOPS- and HEPES-free culture medium (#2 and #3 in diagram below). An oil overlay is not necessary due to the short exposure time.
5. Immediately after the ICSI procedure, incubate the oocytes for 15 minutes in the equilibrated Ca²⁺-Ionophore **GM508 CultActive** drops (#1).
6. Remove the oocytes from the **GM508 CultActive** drop and wash them twice in a HEPES-or MOPS-free culture medium (#2 and #3).
7. Place the oocytes in culture media for further culture.
8. Assess the development at desired time points.

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