



Reference Stock Culture versus Working QC Stock Culture

MicroBioLogics' customers often require specific information regarding the microorganism preparations they use and raise the following question.

QUESTION

“What is the difference between a reference stock culture and a working QC stock culture?”

RESPONSE

Several basic definitions will provide the answer to this important question.

A. Reference Culture

- A reference culture is a microorganism preparation that is obtained from a culture type collection.

B. Reference Stock Culture

- A reference stock culture is a microorganism preparation that is traced to and derived from an authentic reference culture.
- Guidelines and standards outline how reference stock cultures must be processed.
- Lyophilization and ultra-cold freezing are the two methods cited for storing reference stock cultures.
- In-house laboratory preparations and commercial preparations can meet reference stock culture criteria.
- Reference stock cultures are commonly used as the source or origin for a working stock culture.


C. Working QC Stock Culture

- A working QC stock culture is a microorganism preparation that is derived from a reference stock culture and in microbiology disciplines is commonly used as a quality control challenge material on a regular, day-to-day basis.
- Guidelines and standards outline how working QC stock cultures must be processed and how often they can be subcultured. Refer to “Daily QC Microorganism Maintenance,” TIB.246 for suggested stock culture maintenance.
- An important issue prevails in guidelines and standards. A working QC stock culture CAN NOT be lyophilized or frozen to assume reference culture status.
- The maximum number of subcultures, or passages, may be cited in guidelines and standards for your industry.

SUMMARY

The information cited offers assurance that all MicroBioLogics' reference stock cultures are a reliable source or origin for working QC stock cultures.

Should any additional questions arise please contact MicroBioLogics' Technical Services at:

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Thank you for extending the opportunity to MicroBioLogics to serve your needs.