

Collecting Salivary TNF-Alpha

Sample Collection Method Overview

✓ Passive Drool

+ Special Considerations

TNF-Alpha levels in oral fluid are often very low and levels do not correlate with levels in serum in healthy donors. TNF-alpha levels in saliva most often will represent a degree of inflammation in the oral mucosal immune compartment.

Antibodies to TNF-alpha are employed in some medications and the use of these medications has the potential to influence the level of TNF-alpha measured in saliva.

This analyte is sensitive to freeze-thaw degradation. Sample collection, storage, and handling should be carefully designed to minimize the impact of freeze-thaw cycles.

Consider documenting parameters to estimate saliva flow-rate (ie; time taken to collect and sample volume). Consistency in collection method is recommended to avoid introducing unsystematic error into your study data.

+ Sample Collection (General Procedure)

Before Sample Collection

- Avoid foods with high sugar, acidity, or caffeine immediately before sample collection.
- Document consumption of alcohol, caffeine, nicotine, and prescription/over-the-counter medications within the prior 12 hours.
- Document vigorous physical activity and the presence of oral disease, injury or inflammation.
- Do not brush teeth or eat a major meal within 60 minutes of sample collection.
- Rinse mouth with water to remove food residue and then **wait at least 10 minutes** before collecting saliva.

During Sample Collection

- **Recommended Collection Volume: 425 µl***
- Use a collection device that has been validated for the measurement of this analyte.
- Follow your selected sample collection device/method protocol.

*Add 300 µl to the total volume of all tests for liquid handling

After Sample Collection

- Record the time and date of specimen collection.
- Refrigerate samples immediately (if possible) and freeze at or below -20°C (household freezer) as soon as possible (within 6 hours of sample collection)
- Samples visibly contaminated with blood should be recollected.
- Do not add preservatives to saliva samples unless it has been previously validated with the assay.
- Consider aliquoting samples to avoid multiple freeze-thaws.