

Collecting Salivary Cytokines

(IFN- γ , TNF- α , IL-1 β , IL-2, IL-5, IL-6, IL-7, IL-8, IL-10, IL-12p70, IL-13, IL-17A)

Sample Collection Method Overview

✓ Passive Drool

+ Special Considerations

Studies show that levels of cytokines in the oral fluid of healthy individuals do not reflect the levels of cytokines in circulation. Levels of cytokines in saliva may also represent individual differences in the degree of inflammation in the oral mucosal immune compartment.

Be sure to review the latest literature to confirm that you are collecting an appropriate oral fluid specimen type given your specific research questions.

Cytokines are 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: 100 μ l (measures up to 10 cytokines)**
- Use a collection device that has been validated for the measurement of this analyte.
- Follow your selected sample collection device/method protocol.

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 they have been previously validated with the assay.
- Consider aliquoting samples to avoid multiple freeze-thaws.