

Sewage Contamination

Human Bacteroides (Hu-Bac) are a genus of gram-negative bacteria that predominantly thrive in the lower gastrointestinal tract of humans and are therefore directly associated with fecal contamination.

Testing for Hu-Bac via Polymerase Chain Reaction (PCR) is a highly sensitive and reliable method of accurately identifying fecal contamination after a potential sewage leak event.

The PCR method involves extracting the bacterial DNA from the environmental sample and exposing it to highly specific and specialized DNA targets called primers, which will only bind and give a positive signal if the Hu-Bac DNA and therefore Hu-Bac is present in the sample/environment.[1]

Analysis can be done on several sample types including swabs, vacuum samples, and water samples. Contact the lab today for more information!

PCR- Fecal Contamination Indicators	Sampling Method	Same Day	1 Day	3 Day	7 Day
Human Bacteroides spp. qPCR	Swabs	\$262.00	\$212.00	\$151.00	\$130.00



CONTACT US Support@envirobiomics.com

OUR ADDRESS 11550 IH 10 W, Suite 105, San Antonio, Texas, 78230

CALL US Phone : 210 570 2095 The presence of fecal pollution in environmental waters poses a potential threat to human health all around the globe.

While traditional fecal indicator bacteria such as Escherichia coli can detect the presence of fecal contamination, they are unable to determine its origin.

Understanding the sources of contamination is essential for facilitating remediation measures, resolving legal responsibility, and characterizing potential public health risks via quantitative microbial risk assessment. [1]





Swab collection method:

- 1.- Use the Envirobiomics sample kit only, no other kit or samples will be accepted.
- 2.- With sterile nitrile gloves on, prepare separate 4"x4" sampling grids for each sample to be taken. Do not re-use sampling grids since you will be cross-contaminating your samples. Alternatively purchase pre-packaged electrical, masking, or paint tape to mark out the 4"x4" areas to be sampled and then swab inside that area. Do not re-use the tape since you will be cross-contaminating your samples.
- 3.- Change nitrile gloves. With sterile nitrile gloves on, remove the swab from sterile packaging.
- 4.- Carefully remove the swab from the container being sure not to accidentally touch swabs to anything other than the site to be sampled.5.. Hold swab at an approximate 30° angle from the sampling surface, taking care not to contaminate any part of the swab.
- 5.- Using firm, even pressure, move the swab slowly and thoroughly over an entire 4 x 4 sampling area using the picture below as a guide. Rotate the swab 180 degrees between the latitudinal and the longitudinal passes.
- 6.- To minimize sampling variability between samples, get in the habit of doing 6 latitudinal and 6 longitudinal passes only. Use the picture below as a guide. If you are unfamiliar with taking samples this way, it is a good idea to practice your sampling technique before going to the site.
- 7.- After sampling is complete, carefully put swab back into its transport container and seal.
- 8.- Label the samples using a permanent ink marker.
- 9.- ALWAYS take background samples in non-fecally contaminated areas to determine if there is background contamination from an unidentified event that may bias your results.

Sample Shipping:

Be sure to label each sample with a unique identifier using a permanent marker.

There are no special shipping requirements since Bacteroideswill does not multiply outside of the intestine.

There is no hold time, however, ship the samples back to the lab as quickly as possible (overnight is ideal). For shipping, use an insulated container. No freezer packs are required.