

# Hydrogen Peroxide Sensing Electrode

Published date: Feb. 1, 2012

## Technology description

### Description

This novel detection probe provides a method for determining hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>) levels in blood plasma, enabling physicians to correlate those levels to essential (idiopathic) hypertension. Even if an individual does not yet have elevated blood pressure, because H<sub>2</sub>O<sub>2</sub> level is directly related to the level of reactive oxygen species in the plasma, this probe can be used as an accurate predictor of risk for hypertension. Since the sensor probe delivers a simple and prompt measurement of H<sub>2</sub>O<sub>2</sub> content without using additional chemicals, it facilitates the physician's ability to treat patients while minimizing waste and the risk of contamination.

From a broader perspective, other diseases in which free radicals have been implicated (such as arthritis, atherosclerosis, cancer, diabetes, and ischemia) can be assessed, once an individual has been identified as being at risk for hypertension. Other contributors to oxidative stress (such as biological and psychological stresses, smoking, and inappropriate diet) may be taken into consideration.

Detection and/or quantitative assay of H<sub>2</sub>O<sub>2</sub> may therefore be an indicator of these causes, permitting a physician to suggest course, timing, and extent of therapeutic intervention.

### Institution

[University of California, San Diego](#)

## 联系我们



叶先生

电话 : 021-65679356

手机 : 13414935137

邮箱 : yeyingsheng@zf-ym.com