



Tyrosine Test

The Astoria-Pacific SPOTCHECK[®] Tyrosine test is used as an aid in screening for hypertyrosinemia due to decreased levels of p-hydroxyphenylpyruvate oxidase (p-HPPA oxidase) activity in newborns. This is most frequently seen as a transient low enzyme activity due to late maturation of the enzyme in newborn infants resulting in the temporary elevation of both tyrosine and phenylalanine in the blood. Occurring less frequently are the rare inherited conditions causing hypertyrosinemia, which cause neurological, liver/kidney disorders.

Tyrosine in a sample reacts with 1-nitros-2-naphthol and the fluorescent compound formed is then measured quantitatively using SPOTCHECK's flow through fluorometer.

Whole blood, spotted on standardized filter paper, S&S[®] 903[™] or equivalent is suitable for analysis. The procedure is designed for use with one 1/8 inch spot but may be adapted to alternative punch protocols with appropriate validation.

Other tests, such as Phenylalanine or Total Galactose, can be run with the Tyrosine analysis simultaneously from the same extracted sample. Sample throughput is 90 per hour.

The SPOTCHECK[®] Tyrosine 50 Hour Reagent Kit is designed to be used on the Astoria-Pacific SPOTCHECK[®] Analyzer. The kit contains all necessary reagents needed for analysis and will provide approximately 50 hours of analyzer run time. Allowing for start up and calibrants, the approximate number of actual samples analyzed per kit is conservatively 2500.