



GASTROINTESTINAL STROMAL TUMOR (GIST)

Real-time PCR assay

GIST Mutation Screening Panel



EntroGen
Predictive • Preventive • Personalized

GASTROINTESTINAL STROMAL TUMOR (GIST)

PDGFRA & c-Kit MUTATIONS IN GIST

Gastrointestinal stromal tumors (GISTs) are the most common mesenchymal tumors of the GI tract. Over 80% of GISTs harbor activating mutations in c-Kit and approximately 5-7% in PDGFRA. Although these mutations are oncogenic, they also predict response to targeted therapy (imatinib) and provide prognostic information. Exon 11 mutations in c-Kit predict more favorable prognosis and response to imatinib, while mutations in exon 9 predict poor prognosis and require a higher dose of therapy. PDGFRA D842V mutation also causes resistance to imatinib. Mutations in c-Kit and PDGFRA are mutually exclusive.

AVAILABLE KITS FOR GIST

PRODUCT NAME	CAT NO.	INTENDED USE
GIST Mutation Screening Panel (c-Kit and PDGFRA somatic mutations)	GIST-RT44	RUO, CE-IVD

EntroGen's GIST mutation screening panel is a real-time polymerase chain reaction (PCR)-based assay that uses allele-specific primers to identify the presence of somatic mutations in c-KIT and PDGFRA genes.

The assessment procedure involves three simple steps:

- 1) Isolation of DNA from tumor biopsies, paraffin-embedded sections (FFPE), or fresh frozen tumors.
- 2) Amplification using the provided reagents.
- 3) Data analysis and interpretation using the real-time PCR software or provided analysis worksheet[†].

EQUIPMENT AND MATERIALS

EntroGen's GIST mutation screening panel requires a real-time PCR instrument capable of detection FAM, VIC, ROX, and CY5 fluorescent probes.

This test includes reagents required for the PCR amplification/detection, as well as validated reaction controls. Columns and reagents for DNA isolation are not included.

[†] Automated analysis worksheets available for certain kits and instruments; please contact support@entrogen.com for more information.