

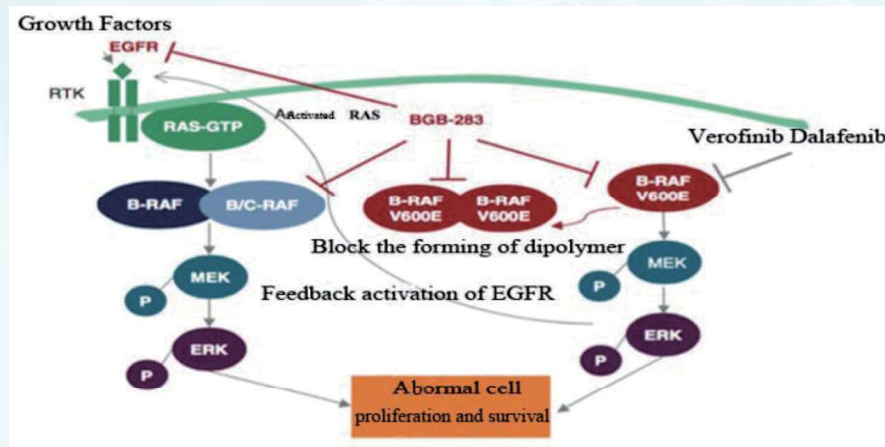
# B-raf Gene Mutation Detection Kit (Real-Time PCR assay)

## GENE MUTATION AND TUMOR

BRAF gene plays an important role in signal transduction involving cell proliferation, by regulating various kinds of cell physiological activities, such as growth, division, death etc.

BRAF gene is the second transmitter in the EGFR signaling pathway. When BRAF gene mutations occurs, the signal pathway will be permanently auto-activated, resulting in excessive cell proliferation and differentiation, thus, which may lead to EGFR-TKI ineffectiveness. Mutations of BRAF occurred in many cancers such as malignant melanoma, colorectal cancer, lung cancer, thyroid carcinoma, liver cancer, etc. The NCCN Guidelines for Colorectal Cancer (2023 Edition) recommends that all patients with metastatic colorectal cancer can be genotyped for B-raf and K-ras mutations.

## BRAF GENE MUTATION & MEDICINE



Some of the targeted drugs are designed to directly target the B-raf mutation to provide treatment options.

## DETECTED GENES

Gene	Cancer Type	Gene Status	Target Drug	Drug Indications
B-raf V600E	NSCLC	Mutation type	Trametinib + Dabrafenib/ Vemurafenib	Sensitive
	CRC	Mutation type	Encorafenib+ Cetuximab/ Panitumumab	Sensitive
		Wild type	Cetuximab/ Panitumumab	Sensitive
	Melanoma	Mutation type	Vemurafenib+ Cobimetinib/ Binimetinib/ Trametinib + Dabrafenib	Sensitive
	Solid Tumors	Mutation type	Trametinib + Dabrafenib	Sensitive



## PRODUCT INFORMATION

Product Name	Core Technology	Pack Size	Instruments Validated	Sample Type
B-raf Gene Mutation Detection Kit	PAP-ARMS®	20 Tests/Kit	Stratagene Mx3000P™ ABI7500 etc.	Tumor tissue Peripheral blood Pleural and ascites



## DETECTION SIGNIFICANCE

- »» BRAF V600E mutation makes response to anti-EGFR or anti-HER2 therapies highly unlikely.
- »» Select patients for treatment with BRAF/MEK inhibitors based on the presence of BRAF V600E.
- »» When MLH1 expression is absent, the presence of BRAF V600E is consistent with sporadic cancer.
- »» Molecular diagnostics may be useful to reclassify follicular lesions. BRAF V600E suggests papillary thyroid carcinoma.



## FEATURES & ADVANTAGES

**Accuracy and Reliability:** Use pre-load PCR tube to effectively avoid cross-contamination.

**High Sensitivity:** Sensitivity can detect V600E mutations as low as 1% in 10 ng DNA.

**Ease of Use:** Based on technology PAP-ARMS®, one step detection in 90 mins.

**Great versatility:** Validated on the most common qPCR machines with stable results.

## DETECTION PROCESS



Tel: +86-592-7578317

Email: spacegen@spacegen.com

www.spacegen.com

XIAMEN SPACEGEN CO.,LTD

XIAMEN SPACESEQ MEDLAB CO.,LTD

Address: NO.2041,XizhouRoad,Xike Town, Tong'an District,Xiamen City, Fujian Province, China

SUZHOU SPACESEQ MEDLAB CO.,LTD

4th Floor, Building 1, No. 777 Kangyuan Road, Chengyang Street, Suzhou City 213000

