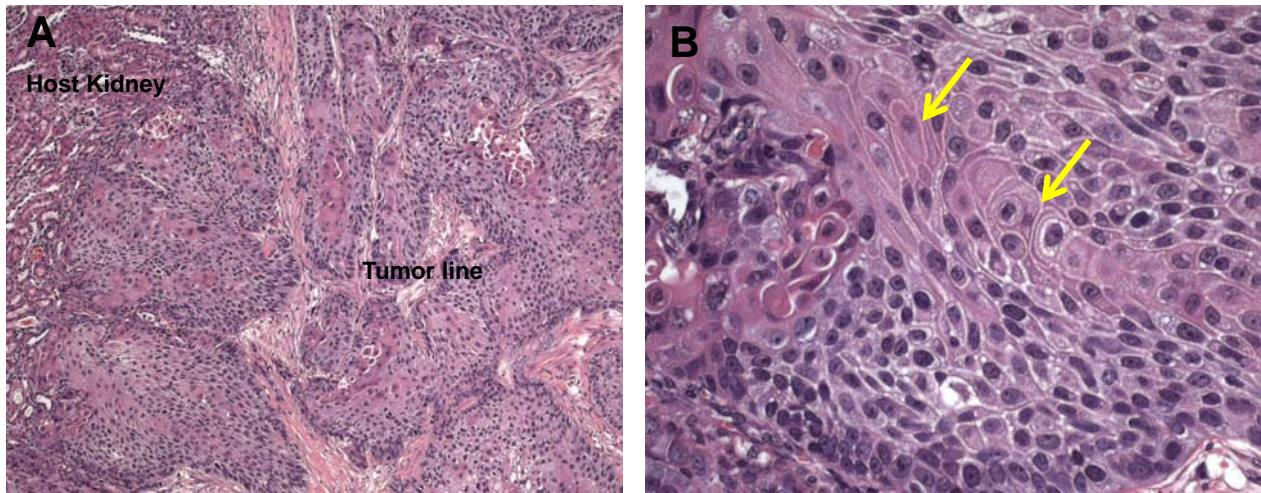


# LTL-670 datasheet

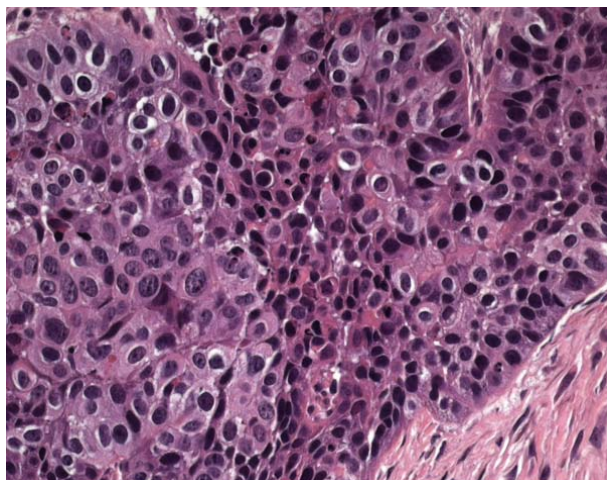
<b>Origin</b>	Primary human lung cancer	<b>Histopathology</b>	Squamous cell carcinoma
<b>Year of establishment</b>	2006	<b>Doubling time</b>	8 days (sub-renal)
<b>Local invasion</b>	Yes, limited	<b>Metastasis</b>	No
<b>Drug sensitivity</b>	Not determined		

The LTL-670 was developed from a patient's primary lung cancer (Squamous cell carcinoma, Stage T2N1M0). Histopathologically, it closely resembles the patient's tumor (Figs 1, 2). When grafted under the renal capsules of SCID mice, the LTL-670 shows limited local invasion into adjacent host kidney parenchyma. No metastasis was observed.



**Fig. 1. H&E stained LTL-670 tissue sections.**

Showing a moderately differentiated squamous cell carcinoma. Keratinization, intercellular bridges (arrows), and stratification are present (A, x100. B, x400).



**Fig. 2. Patient's cancer tissue before grafting.**

The tumor is a moderately differentiated squamous cell carcinoma showing focal keratinization and stratification. (x400)

### Genetic and epigenetic characteristics

The LTL-670 tissue line has been characterized using array CGH and Affymetrix chips. Some of the genes with potential therapeutic application are listed below.

Tissue microarrays containing LTL-670 tissue are available for screening potential molecular targets.

#### LTL-670 gene expression profile

Genes	Expression in LTL-670	Current stage in drug development
ERCC1	+++	Clinical
RRM1	++++	Clinical
PTEN	++	Clinical
BRCA1	+	Clinical
EGFR	++++	Clinical
HER (erb-B)	++	Clinical
KRAS	+++	Clinical
P27	++++	Clinical
MRP2	/	Clinical
FasL	-	Clinical
bTubIII (tubulins)	/	Clinical
VEGFR-1	/	Clinical
VEGFR-2	/	Clinical
VEGFR-3	/	Clinical
PDGFR	+	Clinical
CD117 (cKIT)	/	Clinical
RET	+	Clinical
CSF-1R	/	Clinical
CTLA-4	/	Clinical
CD28	-	Pre-clinical
TLR9	/	Pre-clinical
IGF1R	++	Pre-clinical
ACVRL1 (ALK1)	+++	Pre-clinical
FAK	/	Pre-clinical

Aurora Kinase (AK)	+++	Pre-clinical
mTOR	/	Pre-clinical
c-Met	/	Pre-clinical
Bcl-2	/	Pre-clinical
COX-2	+	Pre-clinical
PCK alpha	+++	Pre-clinical

## Applications

1. Pre-clinical evaluation of existing and potential anticancer drugs. Examination of drug efficacy on tumor growth, cell death (apoptosis, necrosis), tissue invasion, and angiogenesis.
2. Discovery of potential therapeutic targets and/or biomarkers for drug sensitivity.
3. Study of mechanisms underlying tumor growth and progression.

## References

1. Wang et al., Lab Invest (2005) 85, 1392-1404
2. Cutz et al, Clin. Cancer Res. 12(13): 4043-4054 (2006).
3. Lin et al, Cancer Res. 68 p.4352-4359 (2008)

For more information, please contact us by email: [LTL@bccrc.ca](mailto:LTL@bccrc.ca) or phone: 1-604-675-8013