

CLAIMS

1. A method of preparing a tissue or cell line sample for use as a control sample in diagnostic histological examination comprising the steps of:
 - (i) mounting a sectioned tissue or cell line sample onto a planar support; characterized by:
 - (ii) measuring the thickness of the sectioned sample using an interferometer;
 - (iii) selecting the sample for use as a control if the thickness of the sectioned tissue sample falls within a predetermined value range, wherein the predetermined value range is the range providing a sample with a degree of staining intensity that can be correlated with a particular positive or negative staining result.
2. The method according to claim 1 wherein the sectioned tissue or cell line sample is derived from a cell line selected from the group consisting of SKBR3, BT-474, BT-549, HS578T, SKOV-3, MCF-7, and T47D.
3. The method according to claim 1 or 2 wherein the histological examination is HER2 (IHC) testing.
4. The method according to any one of claims 1 to 3 wherein the sectioned sample is a section of cells derived from a cultured cell line or a cell block.
5. The method according to claim 4 wherein the sectioned sample is a section of cells derived from a cultured cell line embedded in a rigid support medium.
6. The method according to claim 5 wherein the sample is a formalin fixed paraffin embedded sample.
7. The method according to any one of claims 4 to 6 wherein the sectional sample contains 1, 2, 3 or 4 cell lines.
8. The method according to claim 7, wherein said cell lines are selected from 0, 1+, 2+, and 3+ cell lines.
9. The method according to claim 7 or 8 wherein the sectioned cell line sample comprises a single cell line.
10. The method according to claim 1 of preparing a cell line sample for use as a control sample in HER2 testing, said method comprising:
 - (i) mounting a sectioned SKBR3 cell line sample onto a planar support;
 - (ii) measuring the thickness of the cell line sample using an interferometer; and
 - (iii) selecting the sample for use as a 3+ control if the thickness of the sectioned cell line sample is in the range of $4.2-2.50\mu\text{m}$, preferably $3.5-3.20\mu\text{m}</math>.$
11. The method according to claim 10 wherein the sectioned sample is a section of cells derived from a cultured cell line or a cell block.
12. The method according to claim 11 wherein the sectioned sample is a section of cells derived from a cultured cell line embedded in a rigid support medium.
13. The method according to claim 12 wherein the sample is a formalin fixed paraffin embedded sample.