Characterization of Two New Recombinant Rabbit anti-PDL1 Antibodies In Bladder Cancer, NSCLC, and Melanoma

With Immune Cell Markers CD3, CD8A, CD20, CD68 and FOXP3

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Abstract

Introduction

Mouse recombinant antibodies are the standard for immunohistochemistry. Histologists have shown that mouse clones tend to stain more immune cells than rabbit clones. Rabbit clones OR-5H8 and OR-5E3 perform as well or better than the FDA approved clones. In bladder cancer case 3 you see that OR-5H8 stains 90% of the tumor.

Results

Immunohistochemistry (IHC) is an important tool to determine the expression level of specific proteins. Tumor markers are good indicators for the success of the therapeutic strategies. The results shown above indicate that the new rabbit clones perform well in bladder, NSCLC and melanoma cases.

Design & Methods

Rabbit recombinant monoclonal antibody platform was developed using B cells from mice immunized with PD-L1 recombinant proteins. More than 10 positive PD-L1 clones, which were first screened by ELISA, were subsequently selected and characterized by immunohistochemistry.

Table 1: Rabbit Anti-CD3 clone characterization

Results

Figure 1: Rabbit Monoclon Isoantigen Development

Figure 2: Recombinant Antibody Production and Characterization

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Table 2: New PD-L1 clones OR-5H8 and OR-5E3 Staining on Normal and Cancer Tissue Array

Figure 3: PD-L1, CD3E, CD8A, CD20, CD68, FOXP3 Antibodies IHC Summary

Figure 4: IHC Screen of Multiple PD-L1 Rabbit Monoclonal Antibodies on NSCLC, Bladder Cancer, & Melanoma

Figure 5: PO-L1, CD3E, CD8A, CD20, CD68, FOXP3 Antibodies IHC Stain on NSCLC, Bladder Cancer, & Melanoma

Table 3: PO-L1 Rab Monoclon Antibodies IHC Results Summary of Fig4

Table 4: PO-L1, CD3E, CD8A, CD20, CD68, FOXP3 Antibodies IHC Summary on NSCLC, Bladder Cancer, & Melanoma

Table 5: PO-L1, CD3E, CD8A, CD20, CD68, FOXP3 Antibodies IHC Summary on NSCLC, Bladder Cancer, & Melanoma

Conclusion

In summary, we have developed two new rabbit anti-PDL1 clones OR-5H8 and OR-5E3 which perform as well or better than the FDA approved clone. These clones have high potential for use in clinical applications.

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