

Additional File 3: Average Consistency percentage on 10-fold cross-validation for KARL vs RL. The table results are reported in the KARL-result/RL-result format. ID = The dataset pointers used in Figure 2, AccAb = Accuracy including Ab-stentions, Acc = Accuracy, SN = Sensitivity, SP = Specificity, BAcc = Balanced Accuracy.

| Dataset | ID | AccAb | Acc | SN | SP | BAcc |
|----------|----|-----------|-----------|-----------|-----------|-----------|
| GEO16011 | A | 88.6/89.1 | 88.6/90.2 | 95.6/98.7 | 18.7/0.00 | 57.2/49.4 |
| GEO1993 | B | 86.2/86.2 | 86.2/86.2 | 92.3/92.3 | 73.7/73.7 | 83.0/83.0 |
| GEO4271 | C | 78.0/78.0 | 78.0/78.0 | 100./100. | 8.30/8.30 | 54.2/54.2 |
| GEO4290 | D | 84.0/82.0 | 84.0/82.8 | 96.3/100. | 31.6/10.5 | 63.9/55.3 |
| GEO4412 | E | 81.2/81.2 | 81.2/82.1 | 93.2/94.8 | 53.8/53.8 | 73.5/74.3 |
| Average | | 83.6/83.3 | 83.6/83.9 | 95.5/97.2 | 37.2/29.3 | 66.4/63.2 |
| GEO10780 | F | 86.5/86.5 | 87.4/87.4 | 42.5/42.5 | 100./100. | 71.2/71.2 |
| GEO15852 | G | 84.9/84.9 | 84.9/84.9 | 83.7/86.1 | 86.0/83.7 | 84.9/84.9 |
| GEO29431 | H | 100./93.9 | 100./100. | 100./100. | 100./100. | 100./100. |
| GEO42568 | I | 95.9/95.9 | 95.9/97.5 | 99.0/100. | 76.5/81.2 | 87.7/90.6 |
| GEO7904 | J | 79.0/77.4 | 79.0/78.7 | 90.7/92.9 | 52.6/47.4 | 71.7/70.1 |
| Average | | 89.3/87.7 | 89.4/89.7 | 83.2/84.3 | 83.0/82.5 | 83.1/83.4 |
| GEO10715 | K | 76.7/60.0 | 79.3/69.2 | 83.3/83.3 | 72.7/37.5 | 78.0/60.4 |
| GEO20916 | L | 100./97.1 | 100./98.5 | 100./100. | 100./97.1 | 100./98.5 |
| GEO23878 | M | 100./94.9 | 100./100. | 100./100. | 100./100. | 100./100. |
| GEO24514 | N | 95.9/93.9 | 95.9/93.9 | 100./100. | 86.7/80.0 | 93.3/90.0 |
| GEO9348 | O | 98.8/95.1 | 100./97.5 | 100./100. | 100./83.3 | 100./91.7 |
| Average | | 94.3/88.2 | 95.1/91.8 | 96.7/96.7 | 91.9/79.6 | 94.3/88.1 |
| GEO10072 | P | 96.3/96.3 | 96.3/98.1 | 100./100. | 91.8/95.8 | 95.9/97.9 |
| GEO18842 | Q | 96.7/91.2 | 96.7/95.4 | 100./100. | 93.3/90.5 | 96.7/95.2 |
| GEO19188 | R | 94.2/94.9 | 94.2/94.9 | 96.7/96.7 | 90.8/92.3 | 93.7/94.5 |
| GEO19804 | S | 95.8/94.1 | 95.8/95.0 | 96.7/94.9 | 95.0/95.0 | 95.0/95.8 |
| GEO7670 | T | 90.9/87.9 | 90.9/92.1 | 94.9/94.9 | 85.2/87.5 | 90.0/91.2 |
| Average | | 94.8/92.9 | 94.8/95.1 | 97.7/97.3 | 91.2/92.2 | 94.3/94.9 |
| GEO17951 | U | 92.0/83.2 | 92.0/86.4 | 89.7/85.1 | 94.2/87.7 | 91.9/86.4 |
| GEO32448 | V | 88.7/88.7 | 88.7/93.4 | 92.5/97.2 | 85.0/90.0 | 88.7/93.6 |
| GEO46602 | W | 98.0/92.0 | 98.0/95.8 | 100./97.2 | 92.9/91.7 | 96.4/94.4 |
| GEO6956 | X | 89.9/87.6 | 89.9/88.6 | 95.6/98.5 | 70.0/55.0 | 82.8/76.8 |
| GEO82188 | Y | 91.2/87.5 | 91.8/89.5 | 92.3/85.9 | 91.4/92.7 | 91.9/89.3 |
| Average | | 91.9/87.8 | 92.1/90.7 | 94.0/92.8 | 86.7/83.4 | 90.4/88.1 |