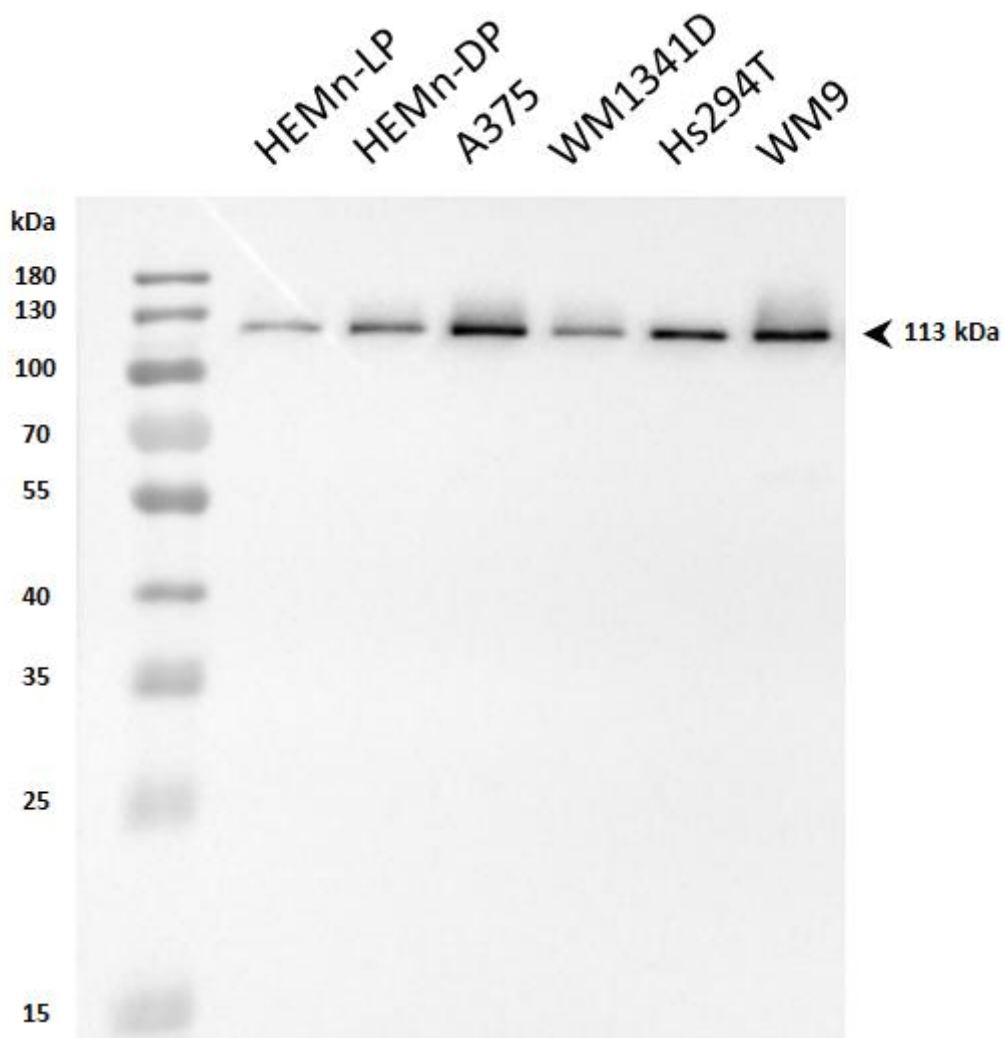


Supplementary Figure S1. Expression of PARP1 at protein level. Full immunoblots showing PARP1 and GAPDH level in cellular extracts of primary normal melanocytes (HEMn-LP and HEMn-DP) and melanoma cell lines derived from the primary tumor (A375 and WM1341D) and lymph node metastases (Hs294T and WM9) are presented. Three biological repetitions (BR) consisting of two-three technical replicates (TR) per BR were performed.



Supplementary Figure S2. Specificity of PARP1 antibody. Full immunoblot showing specific band of PARP1 protein (113 kDa) in cellular extracts of primary normal melanocytes (HEMn-LP and HEMn-DP) and melanoma cell lines derived from the primary tumor (A375 and WM1341D) and lymph node metastases (Hs294T and WM9) are presented.

Supplementary Table S1. Correlations between PARP1 expression and clinicopathologic parameters of cutaneous melanoma patients with lymph node metastases.

| CLINICOPATHOLOGICAL PARAMETERS | PARP1 expression | | <i>p</i> value |
|---|---------------------------------|---------------------------------|----------------|
| | Low (H-score ≤280) (n=26) | High (H-score >280) (n=6) | |
| Age (18-80) ^a | 60 (53 - 73) | 66 (44 - 70) | 0.87 |
| Gender ^b | | | 0.17 |
| Female | 15 (58%) | 1 (17%) | |
| Male | 11 (42%) | 5 (83%) | |
| Primary tumor location ^c | | | 0.54 |
| Head/neck | 1 (4%) | 1 (17%) | |
| Extremities | 11 (42%) | 2 (33%) | |
| Trunk | 10 (38%) | 3 (50%) | |
| Hand/foot | 4 (15%) | 0 (0%) | |
| Primary tumor (pT) ^a | | | 0.22 |
| pT1 | 1 (4%) | 1 (17%) | |
| pT2 | 0 (0%) | 0 (0%) | |
| pT3 | 7 (27%) | 3 (50%) | |
| pT4 | 18 (69%) | 2 (33%) | |
| Distant metastases (pM) ^b | | | 0.62 |
| No metastases (pM-) | 20 (77%) | 4 (67%) | |
| Metastases present (pM+) | 6 (23%) | 2 (33%) | |
| Recurrence ^b | | | 1.00 |
| No | 7 (27%) | 2 (33%) | |
| Yes | 19 (73%) | 4 (67%) | |
| Breslow thickness ^a | | | 0.22 |
| ≤1 mm | 1 (4%) | 1 (17%) | |
| 1.01-2.00 mm | 0 (0%) | 0 (0%) | |
| 2.01-4.00 mm | 7 (27%) | 3 (50%) | |
| >4 mm | 18 (69%) | 2 (33%) | |
| Clark level ^a | | | 0.92 |
| I | 0 (0%) | 0 (0%) | |
| II | 2 (8%) | 1 (17%) | |
| III | 8 (31%) | 2 (33%) | |
| IV | 10 (38%) | 2 (33%) | |
| V | 6 (23%) | 1 (17%) | |

| | | | | |
|---|----------|----------|--|--------------|
| Histopathological type ^b | | | | 0.80 |
| Superficial spreading melanoma | 4 (15%) | 1 (17%) | | |
| Nodular melanoma | 18 (70%) | 5 (83%) | | |
| Acral lentiginous melanoma | 4 (15%) | 0 (0%) | | |
| Mitotic rate ^a | | | | 1.00 |
| 0 | 3 (12%) | 0 (0%) | | |
| 1-3 | 2 (8%) | 0 (0%) | | |
| ≥4 | 20 (80%) | 6 (100%) | | |
| Ulceration ^c | | | | 1.00 |
| No | 11 (42%) | 2 (33%) | | |
| Yes | 15 (58%) | 4 (67%) | | |
| Lymphangioinvasion ^c | | | | 1.00 |
| No | 22 (85%) | 5 (83%) | | |
| Yes | 4 (15%) | 1 (17%) | | |
| Tumor-infiltrating lymphocytes (TILs) ^c | | | | 0.51 |
| No | 2 (8%) | 0 (0%) | | |
| Non-brisk | 21 (81%) | 4 (67%) | | |
| Brisk | 3 (12%) | 2 (33%) | | |
| Microsatellitosis ^c | | | | 0.034 |
| No | 24 (92%) | 3 (50%) | | |
| Yes | 2 (8%) | 3 (50%) | | |
| Regression ^c | | | | 0.48 |
| No | 24 (92%) | 5 (83%) | | |
| Yes | 2 (8%) | 1 (17%) | | |

^a *p* Wilcoxon two sample test

^b *p* value of Fisher's exact test

^c *p* value of chi² test

Statistically significant results (*p*<0.05)