

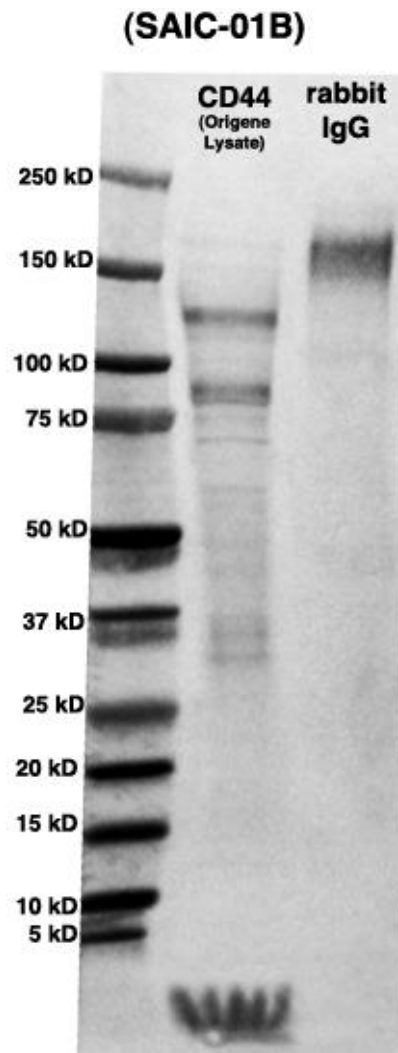
Supplemental Figure 3. Images of Western blots from screening the recombinant and hybridoma monoclonal antibodies (mAbs) using recombinant proteins, overexpressed lysates, and 6 breast cancer NCI60 cell line lysates. The recombinant proteins were obtained from the Argonne National Laboratory (ANL, Lemont, IL), and the overexpressed lysates were purchased from Origene (Rockville, MD). Expected molecular weights (MWs) of the particular recombinant proteins or the overexpressed lysate-proteins are given in the captions above the Western blot images. The purified mAbs were run as controls alongside the recombinant proteins or the overexpressed lysate-proteins. The 6 breast cancer cell lines from the NCI60 collection (<http://dtp.nci.nih.gov/index.html>) were BT-549, HS578T, MCF7, MDA-MB-231/ATCC, MDA-MB-468, and T-47D, and were selected based on their reactivity in reverse phase microarrays (Chung, J.-Y., Lee, S.-J., Kris, Y., Braunschweig, T., Traicoff, J. L., and Hewitt, S. M. (2008) A well-based reverse-phase protein array applicable to extracts from formalin-fixed paraffin-embedded tissue. *Proteomics Clinical applications* 2, 1539-1547), and because the mAbs' protein targets (except for TSHB and CGB) were expected to be detected in breast cancer cell lines. For the Western blots using the NCI60 breast cancer cell lines, the MWs given in the captions above the blot images are reported as given in UniProt, including the MWs of all protein isoforms.

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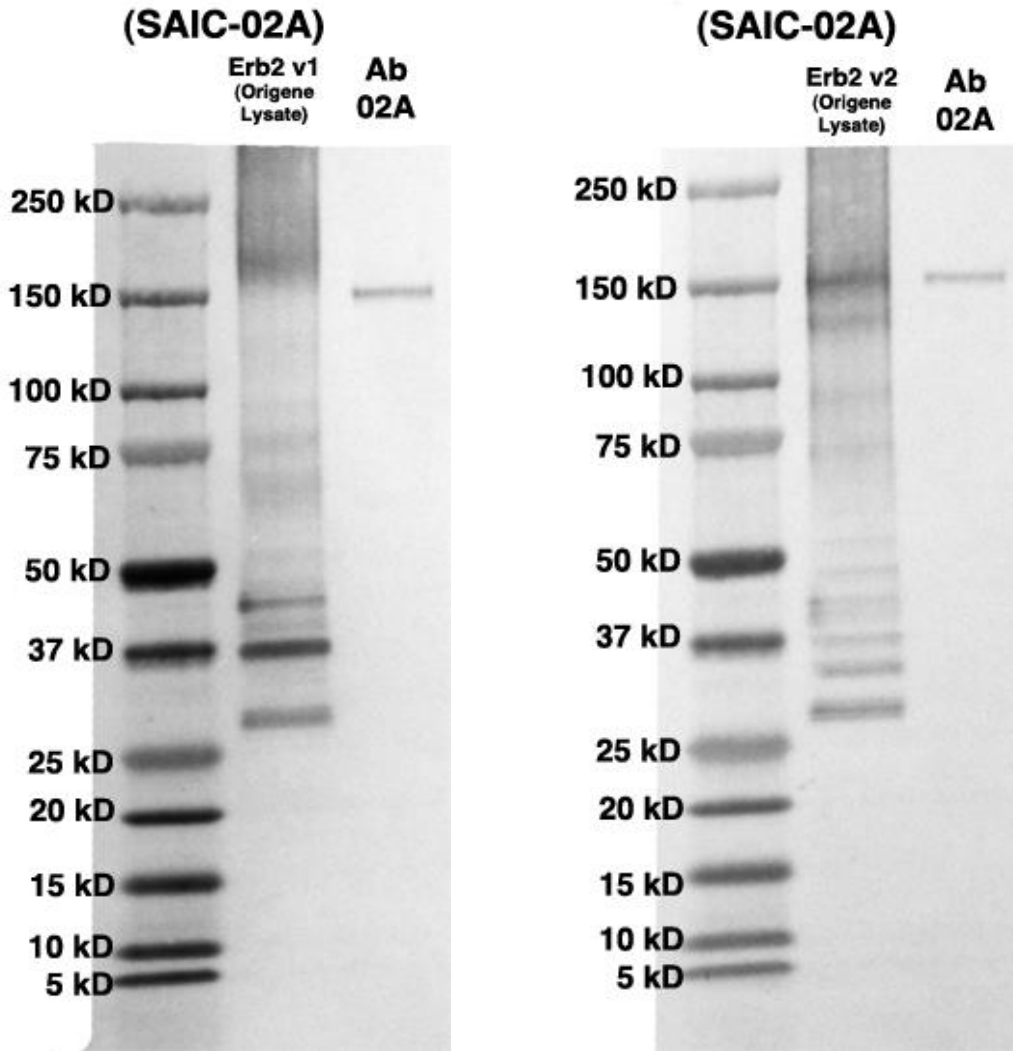
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SAIC-01B, CD44, TFIPVTSK, expected MW from overexpressed lysate (Origene) = 79.2 kDa.

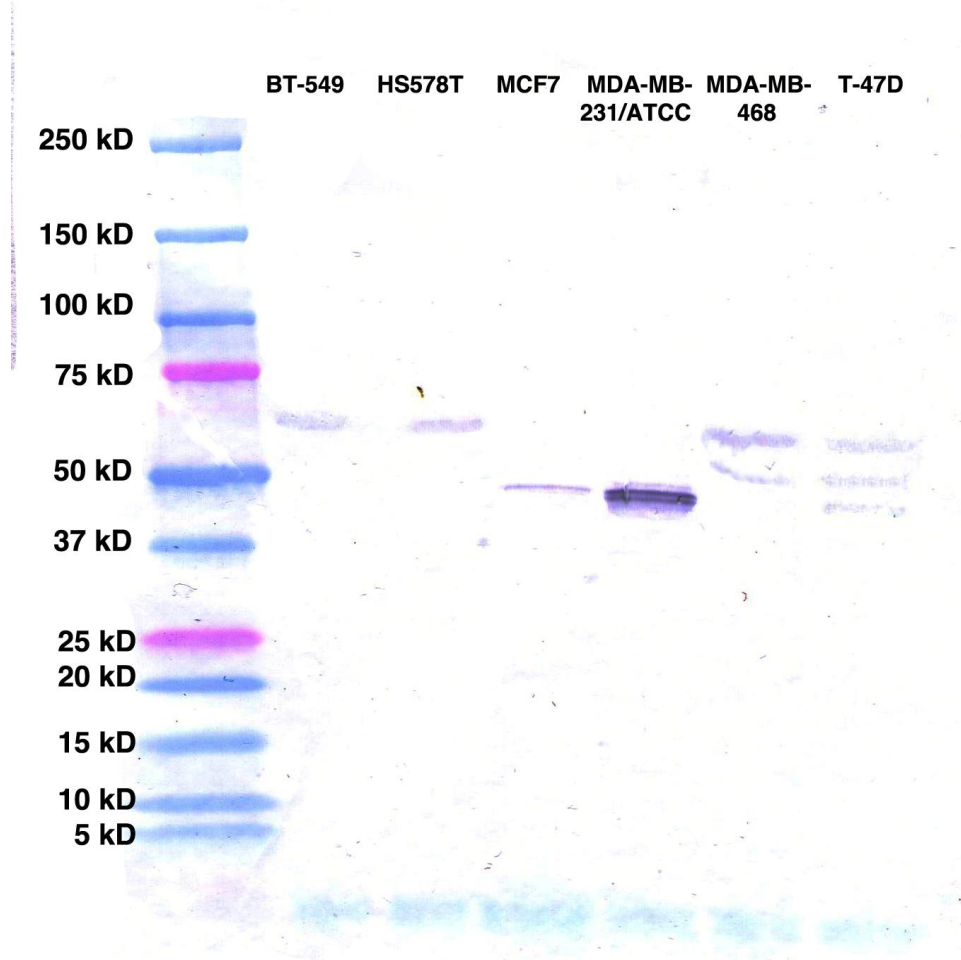


SAIC-02A, ERBB2, GLQSLPTHDPSPQLQR, expected MW from overexpressed lysate, variant 1 (Origene) = 38 kDa, variant 2 (Origene) = 36.5 kDa.

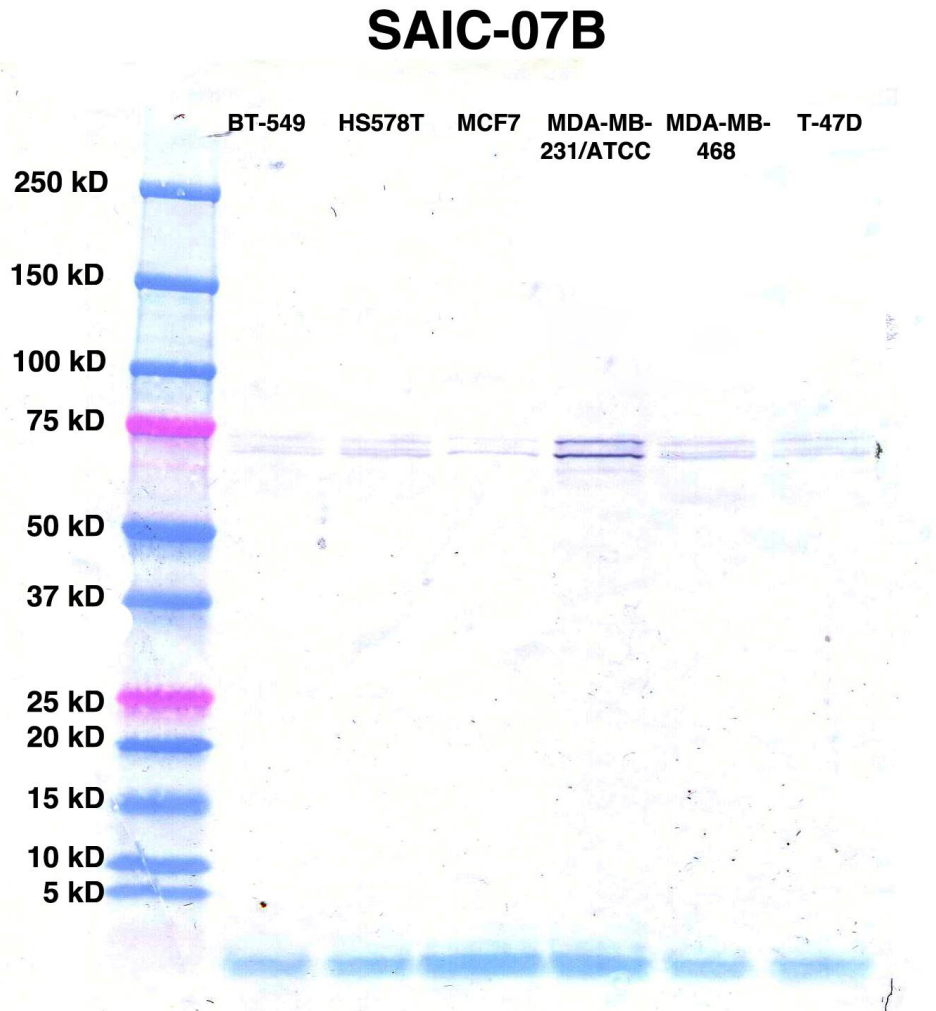
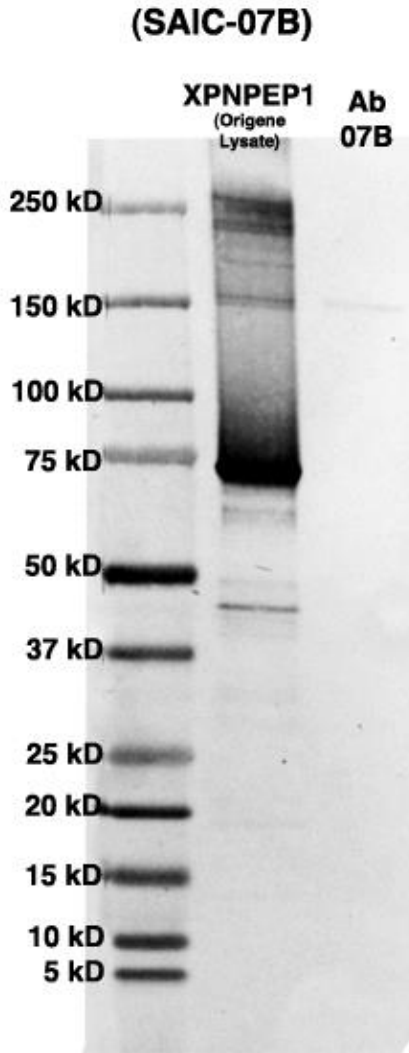


SAIC-02A, ERBB2, GLQSLPTHDPSPQLQR, UniProt: Isoform 1 MW = 138 kDa, Isoform 2 MW = 71 kDa, Isoform 3 MW = 63 kDa, Isoform 4 MW = 137 kDa, Isoform 5 MW = 135 kDa, Cytoplasmic domain MW = 64 kDa, Extracellular domain = 69 kDa.

SAIC-02A

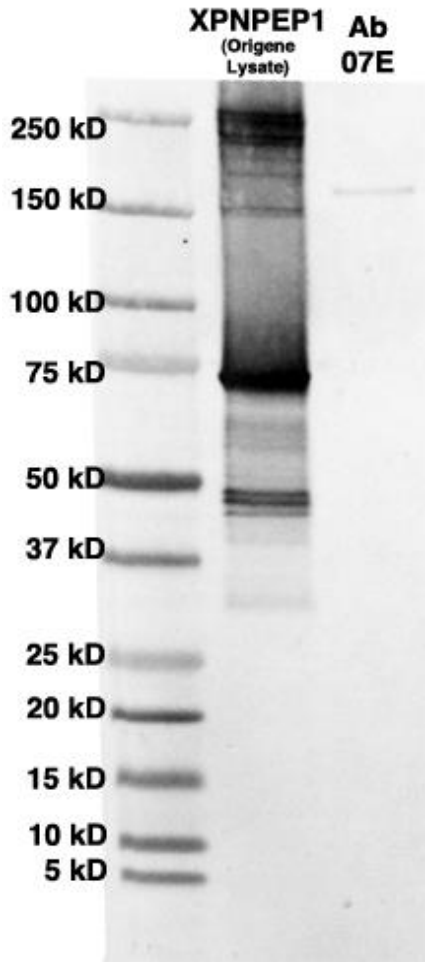


SAIC-07B, XPNPEP1, GSLTFEPLTLVPIQTK, expected MW from overexpressed lysate (Origene) = 74.6 kDa; UniProt: Isoform 1 MW = 70 kDa, Isoform 2 MW = 67 kDa, Isoform 3 MW = 75 kDa.

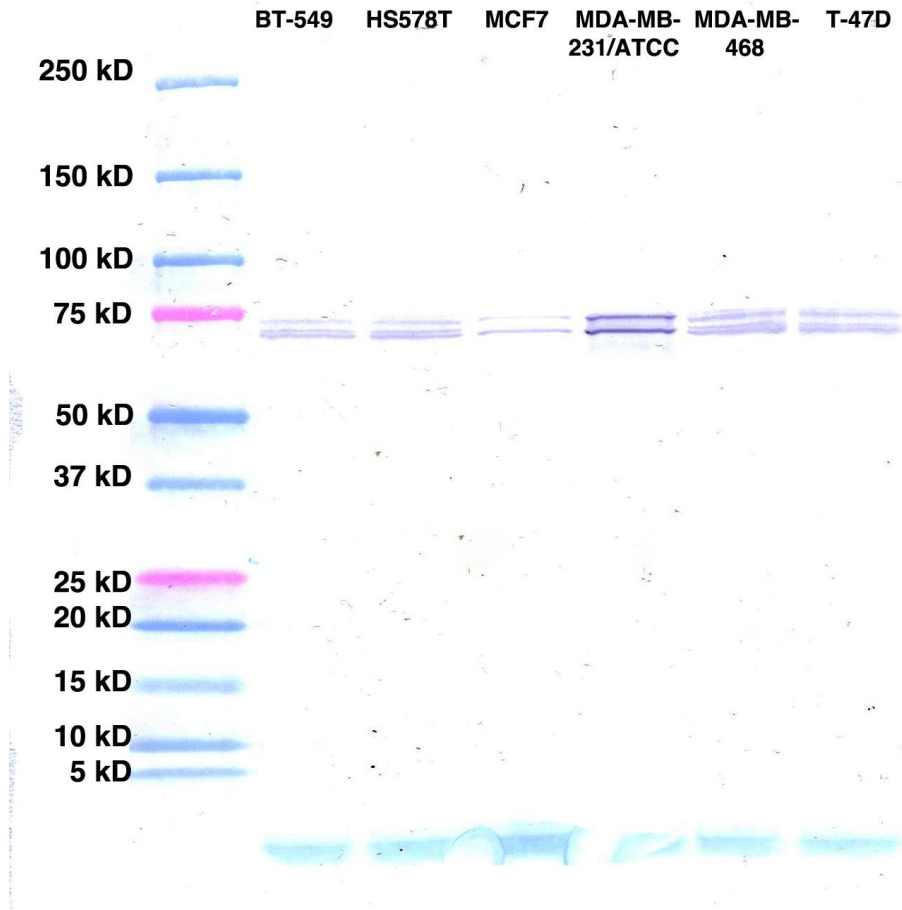


SAIC-07E, XPNPEP1, TSLSLDEVYLIDSGAQYK, expected MW from overexpressed lysate (Origene) = 74.6 kDa; UniProt: Isoform 1 MW = 70 kDa, Isoform 2 MW = 67 kDa, Isoform 3 MW = 75 kDa.

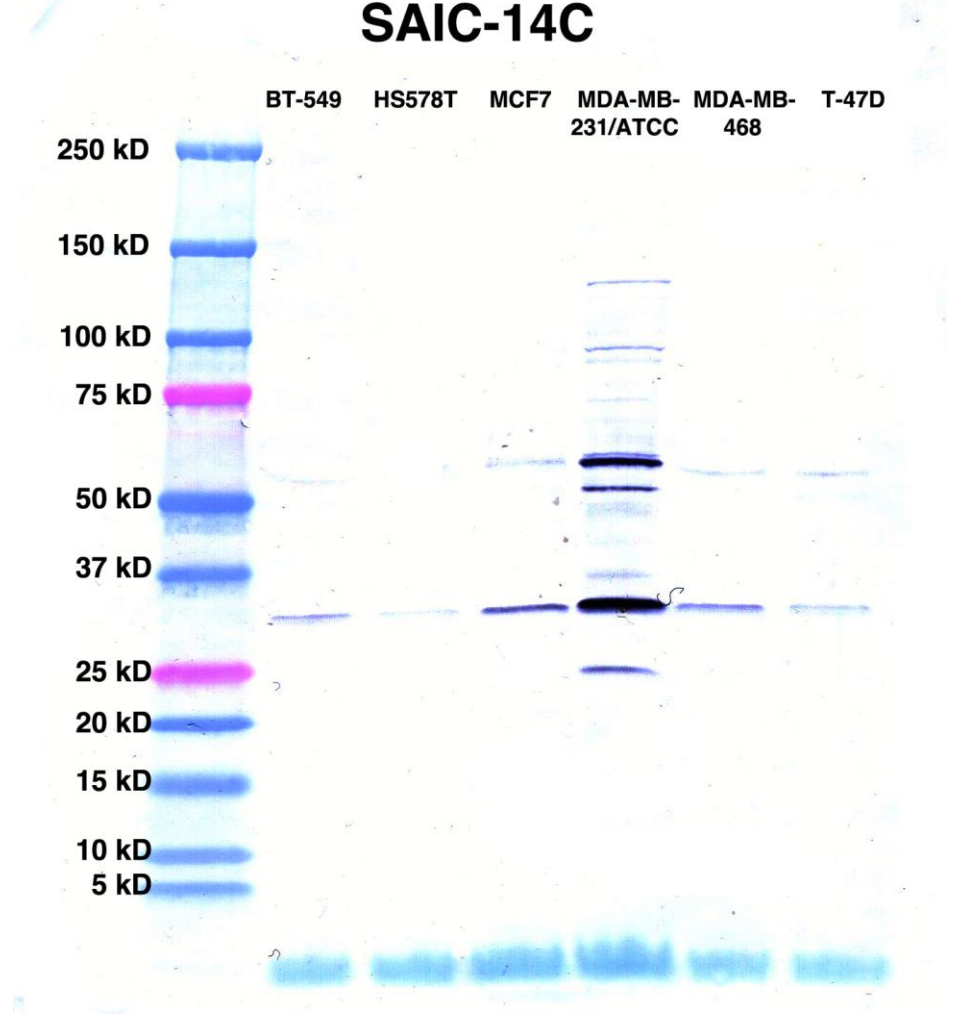
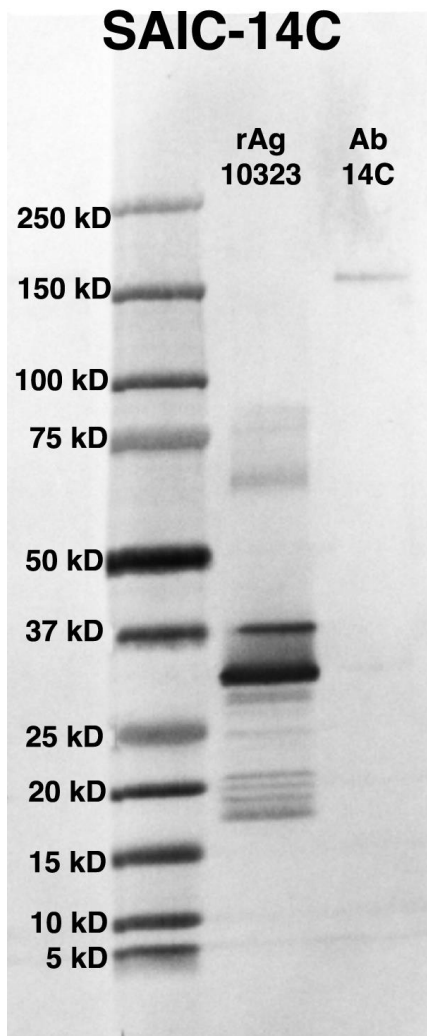
(SAIC-07E)



SAIC-07E

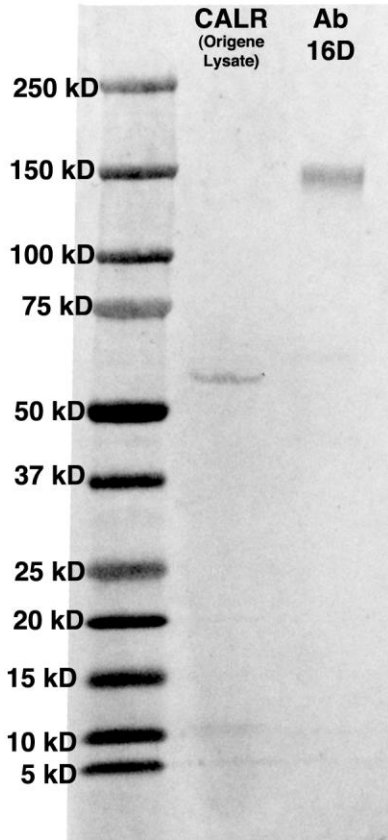


SAIC-14C, ANXA4, DEGNYLDDALVR, expected MW from recombinant protein antigen (rAg) (Argonne National Laboratory, ANL # 10323) = 35.7 kDa; UniProt: Protein MW = 36 kDa.

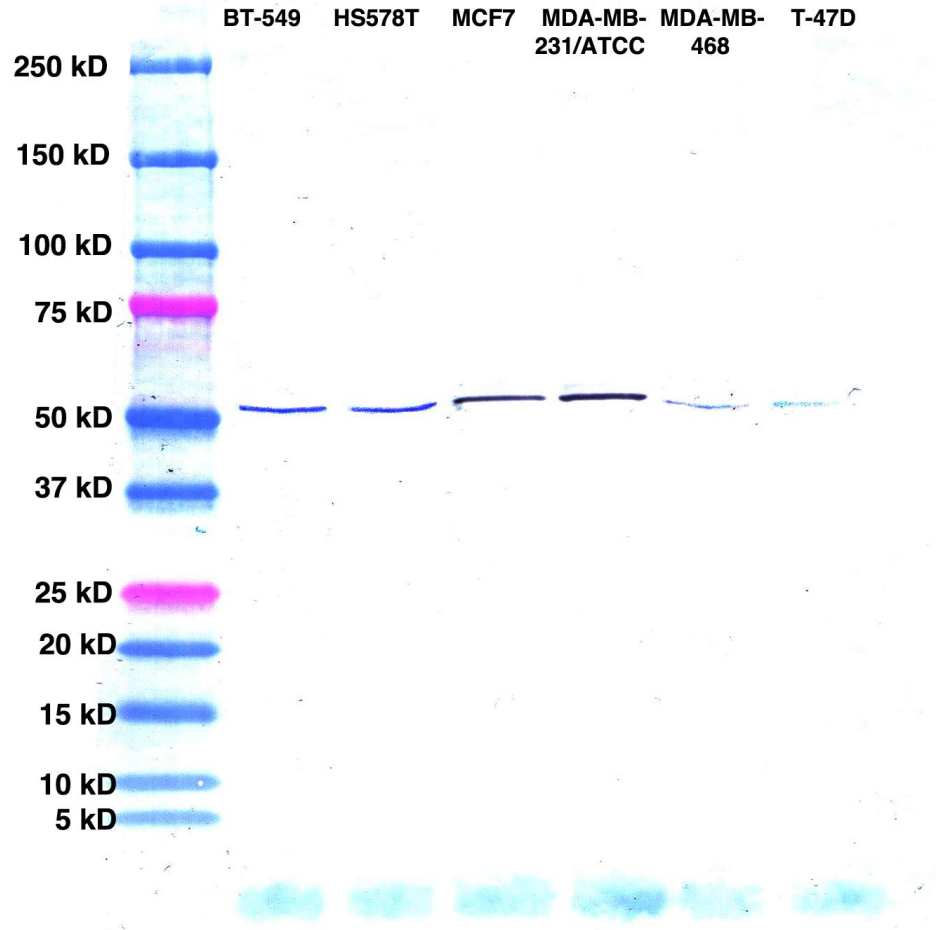


SAIC-16D, CALR, GLQTSQDAR, expected MW from overexpressed lysate (Origene) = 46.4 kDa; UniProt: Protein MW = 48 kDa.

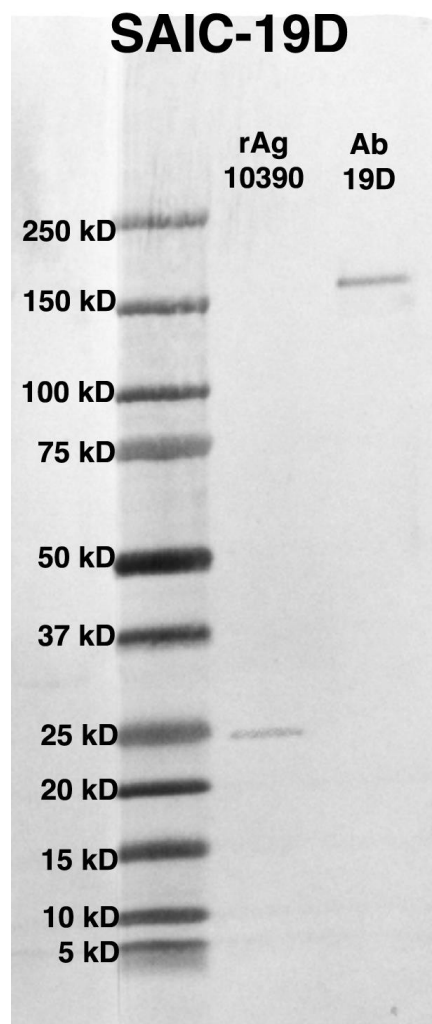
SAIC-16D



SAIC-16D

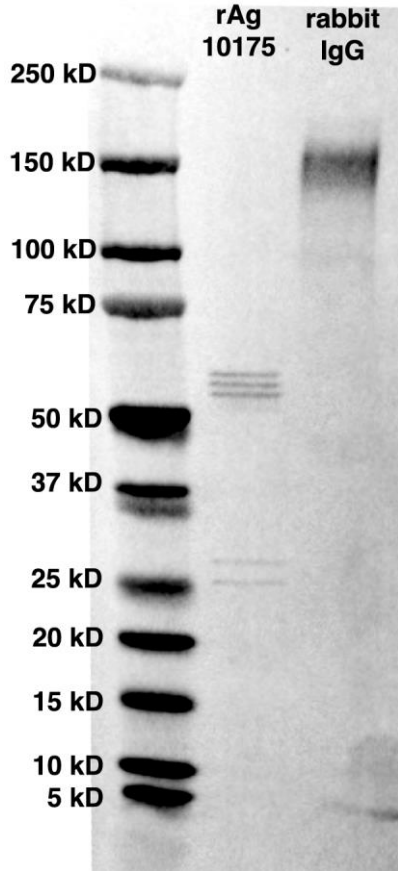


SAIC-19D, GRB2, FGNDVQHFK, expected MW from recombinant protein antigen (rAg) (Argonne National Laboratory, ANL # 10390) = 25.2 kDa.

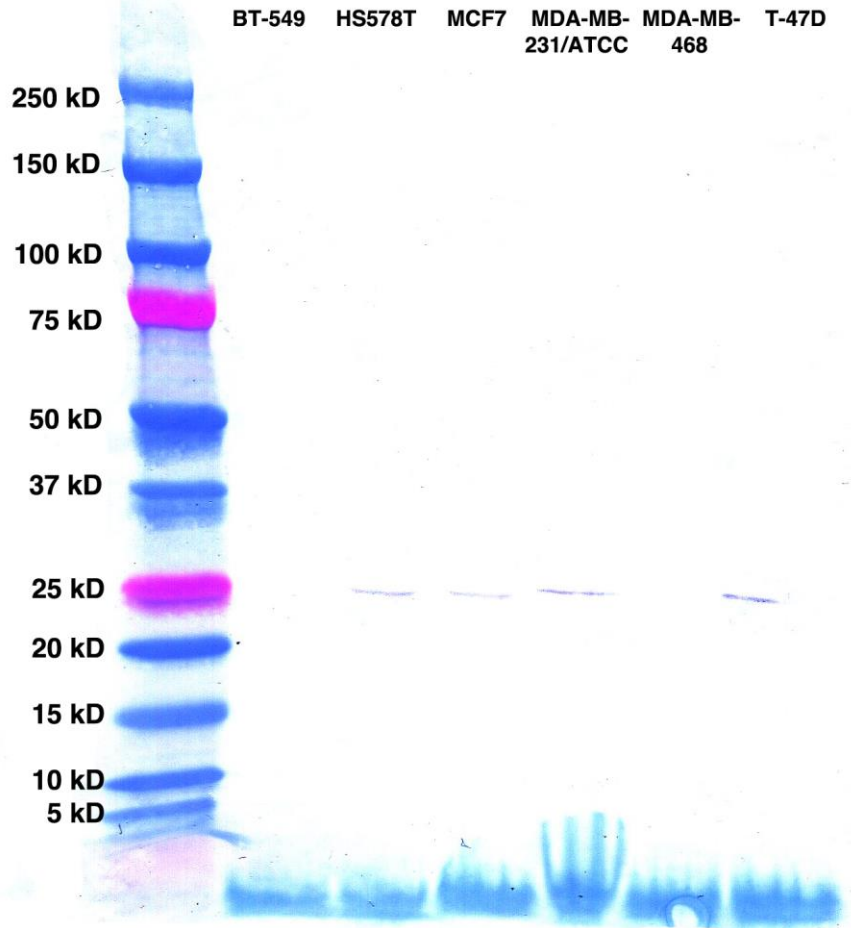


SAIC-23C, HSPB1, VSLDVNHFAPDELTVK, expected MW from recombinant protein antigen (rAg) (Argonne National Laboratory, ANL # 10175) = 23.1 kDa; UniProt: Protein MW = 23 kDa.

SAIC-23C

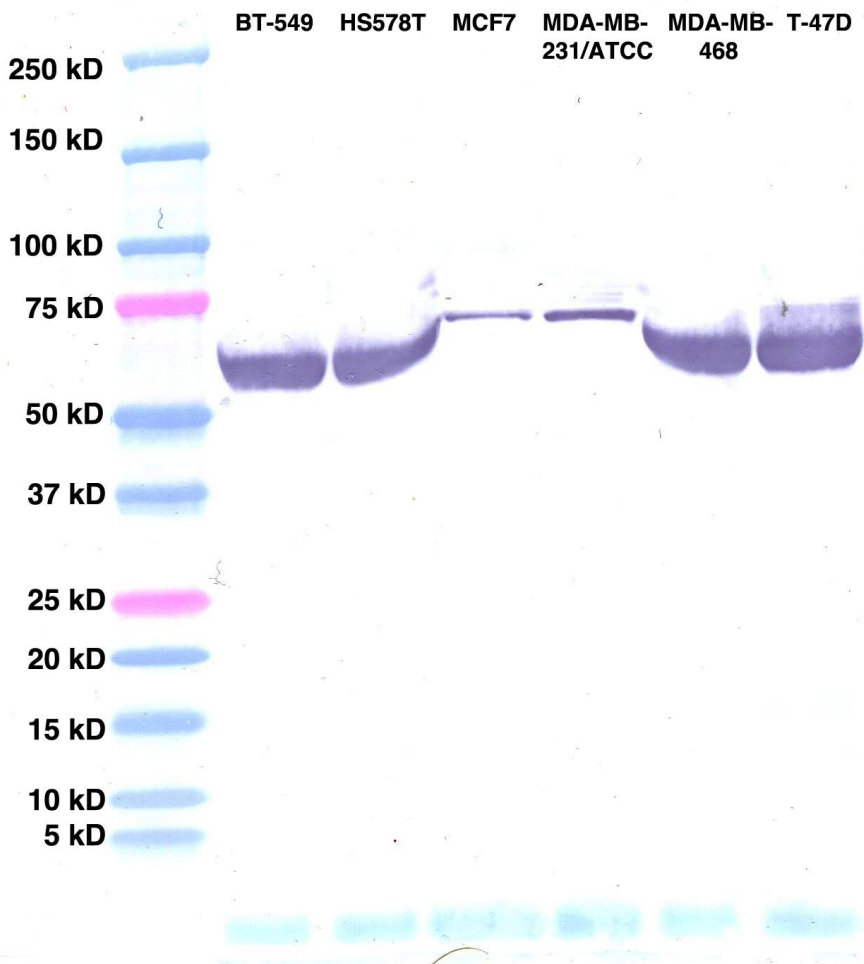


SAIC-23C



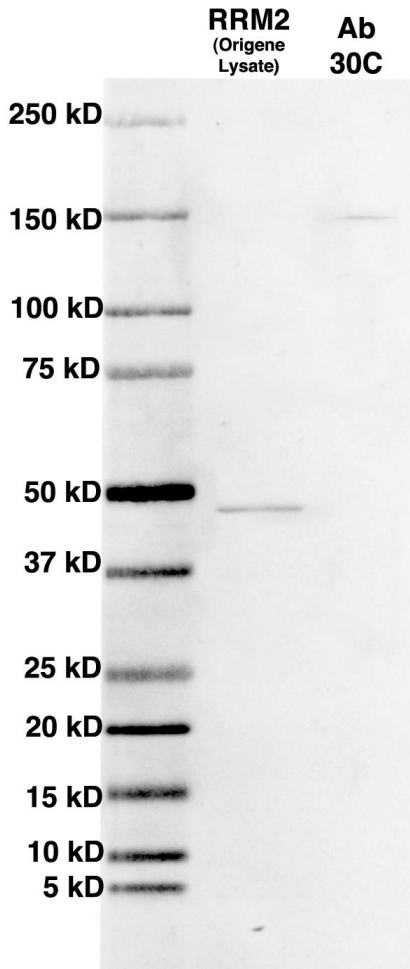
SAIC-28A, RAD23B, ILNDDTALK, UniProt: Isoform 1 MW = 43 kDa, Isoform 2 MW = 35 kDa; has also been observed at ~58 kDa (Bergink, S., Toussaint, W., Luijsterburg, M. S., Dinant, C., Alekseev, S., Hoeijmakers, J. H., Dantuma, N. P., Houtsmuller, A. B., and Vermeulen, W. (2012) Recognition of DNA damage by XPC coincides with disruption of the XPC-RAD23 complex. *J. Cell Biol.* 196, 681-688).

SAIC-28A

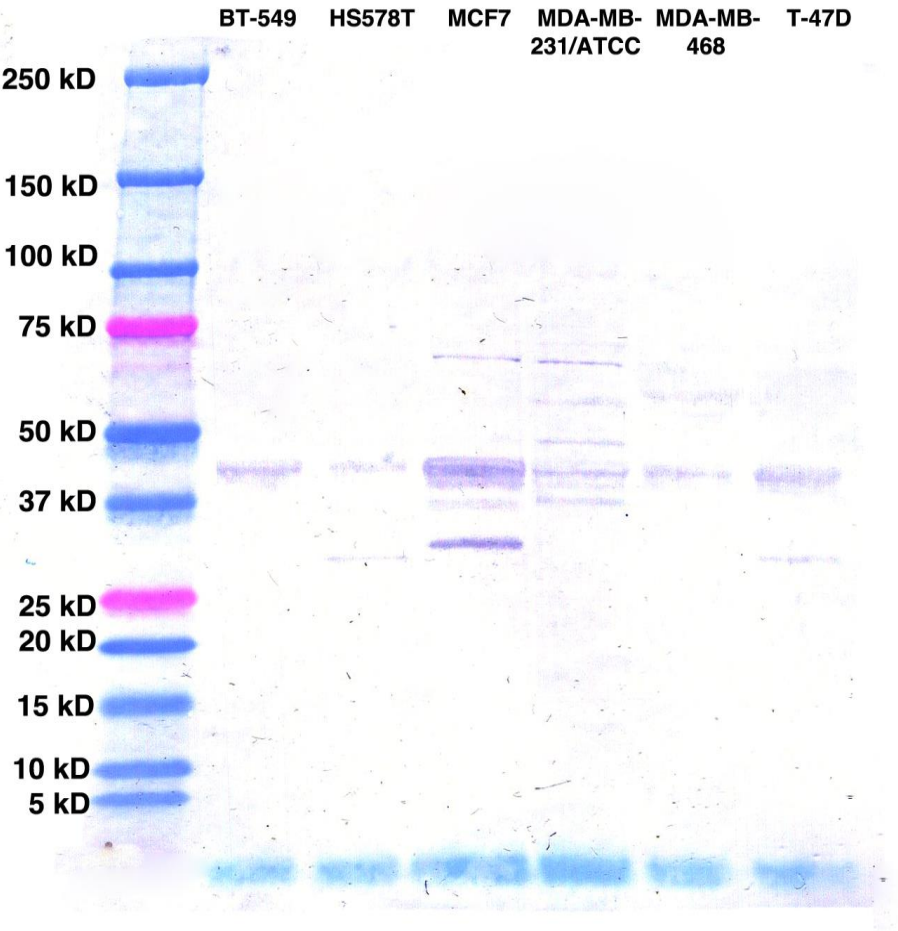


SAIC-30C, RRM2, IEQEFLTEALPVK, expected MW from overexpressed lysate (Origene) = 44.7 kDa, UniProt: Isoform 1 MW = 45 kDa, Isoform 2 MW = 51 kDa.

SAIC-30C

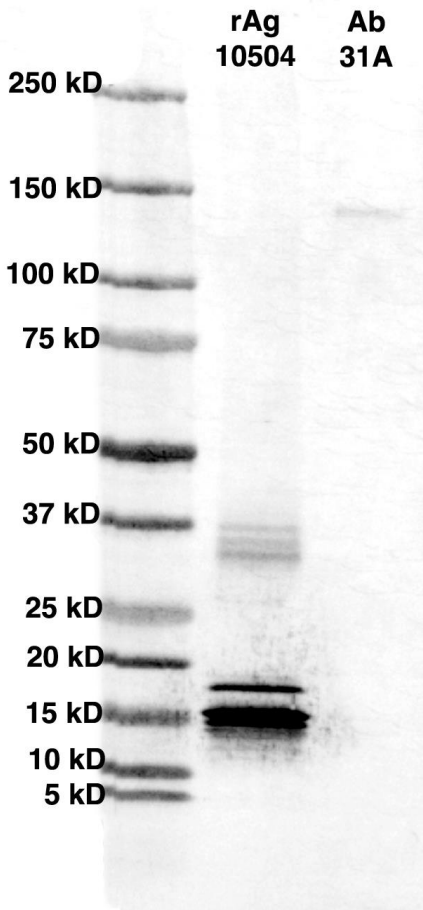


SAIC-30C

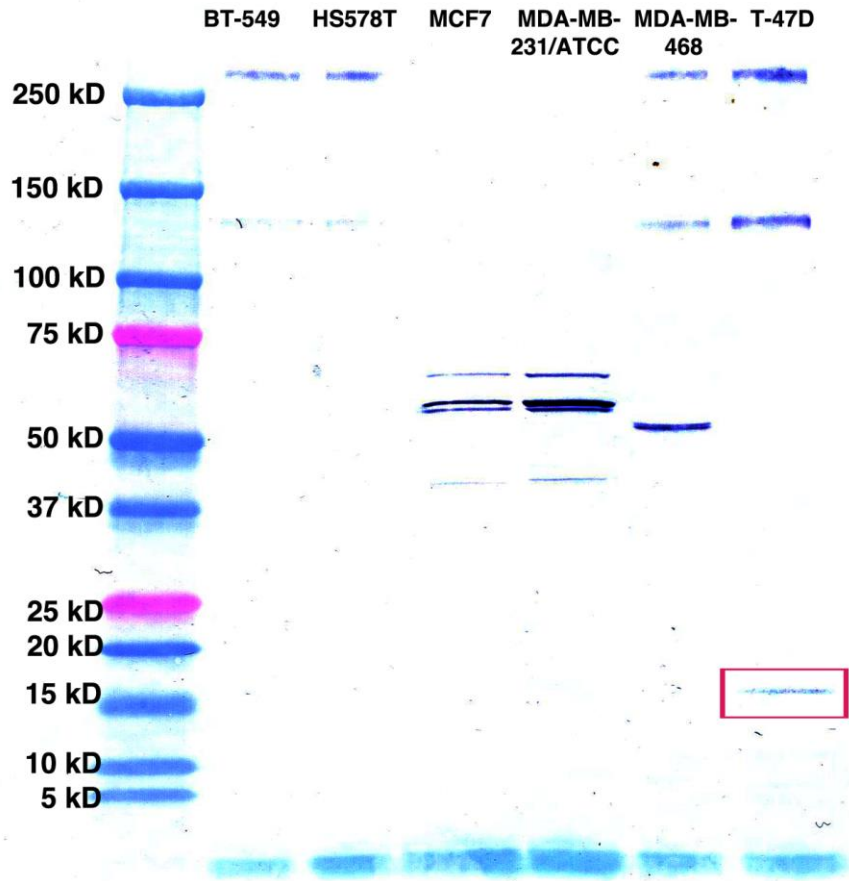


SAIC-31A, SNCG, TVEEAENIAVTSGVVR, expected MW from recombinant protein antigen (rAg) (Argonne National Laboratory, ANL # 10504) = 13.6 kDa, UniProt: Protein MW = 13 kDa.

SAIC-31A

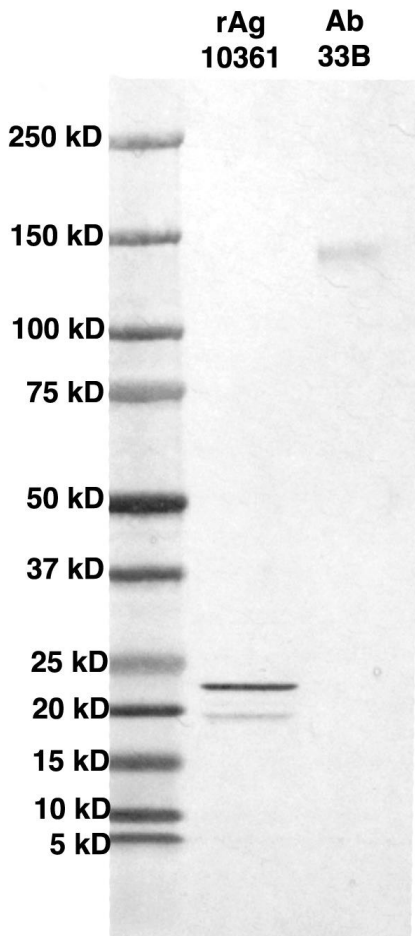


SAIC-31A

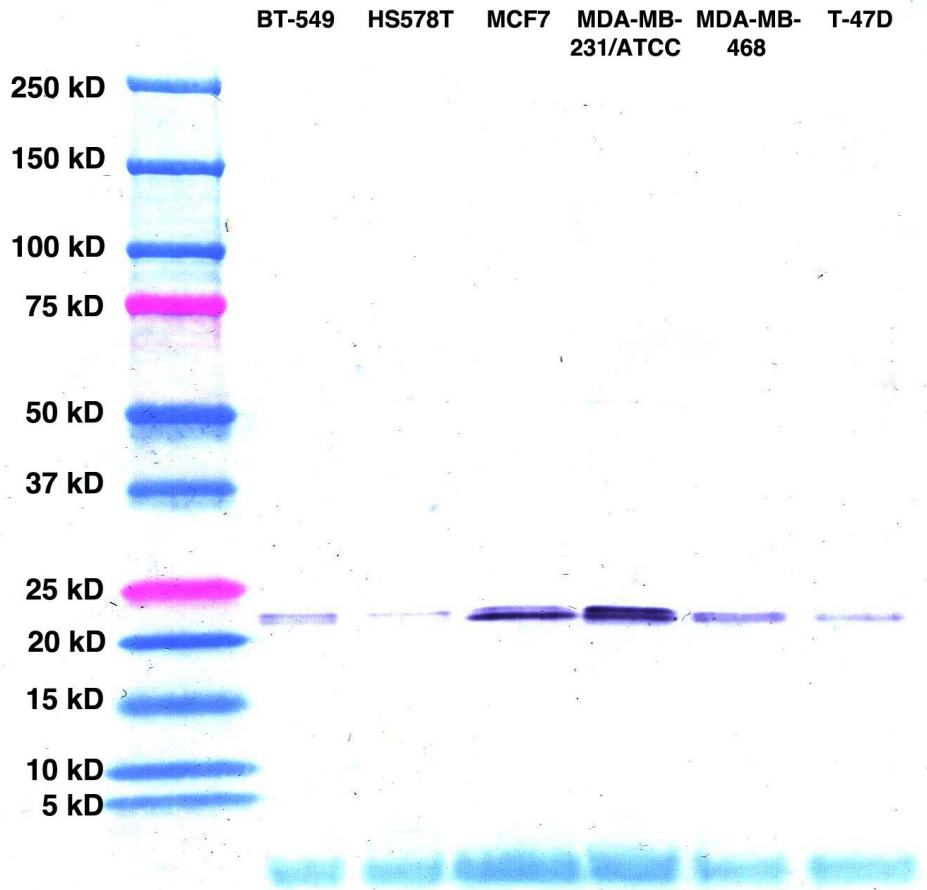


SAIC-33B, TAGLN, AAEDYGVK, expected MW from recombinant protein antigen (rAg) (Argonne National Laboratory, ANL # 10361) = 22.5 kDa, UniProt: Protein MW = 23 kDa.

SAIC-33B

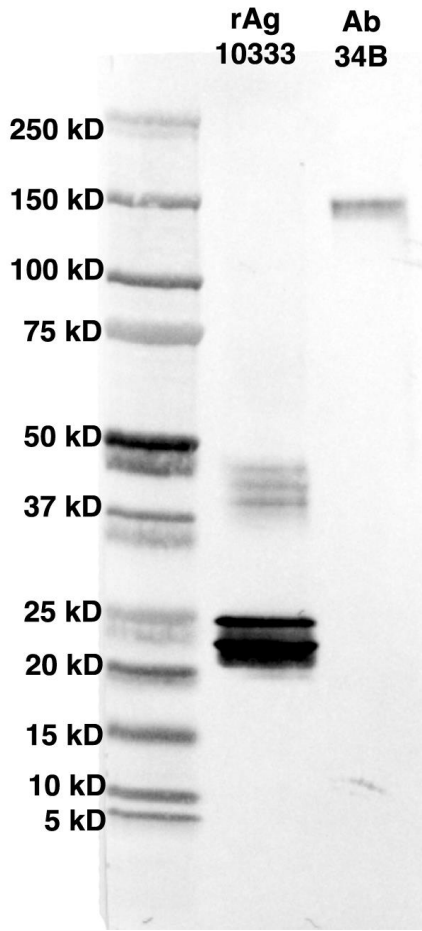


SAIC-33B

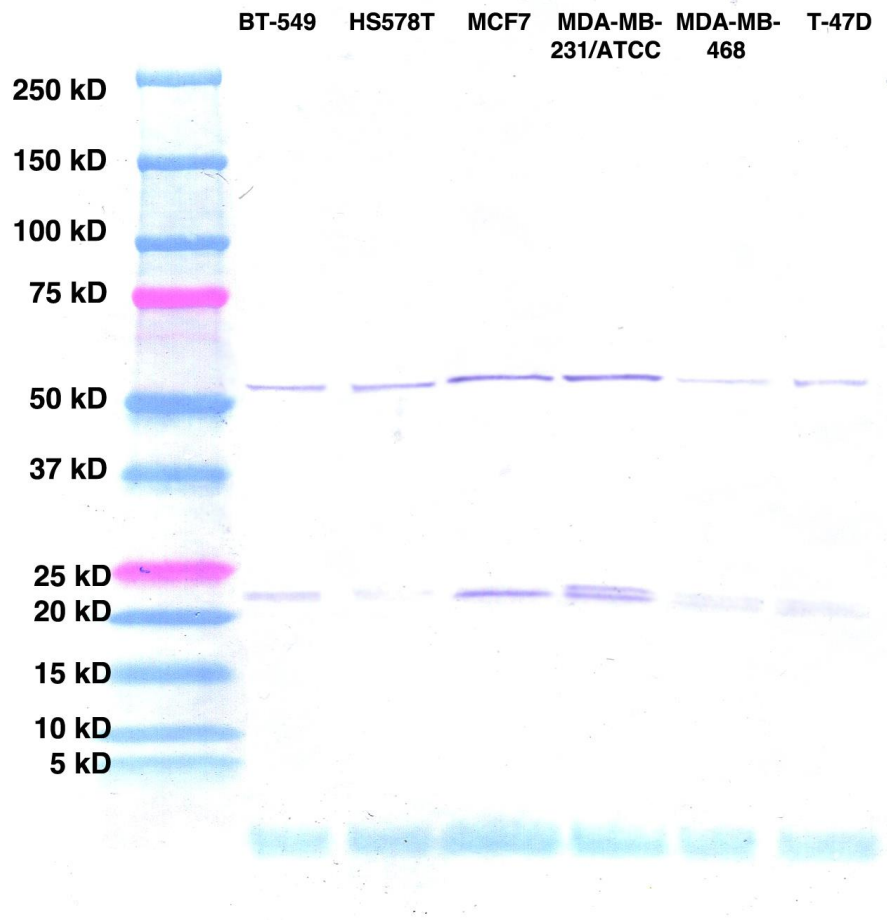


SAIC-34B, PRDX2, LSEDYGVLK, expected MW from recombinant protein antigen (rAg) (Argonne National Laboratory, ANL # 10333) = 21.9 kDa, UniProt: Isoform 1 MW = 22 kDa, Isoform 2 MW = 16 kDa.

SAIC-34B

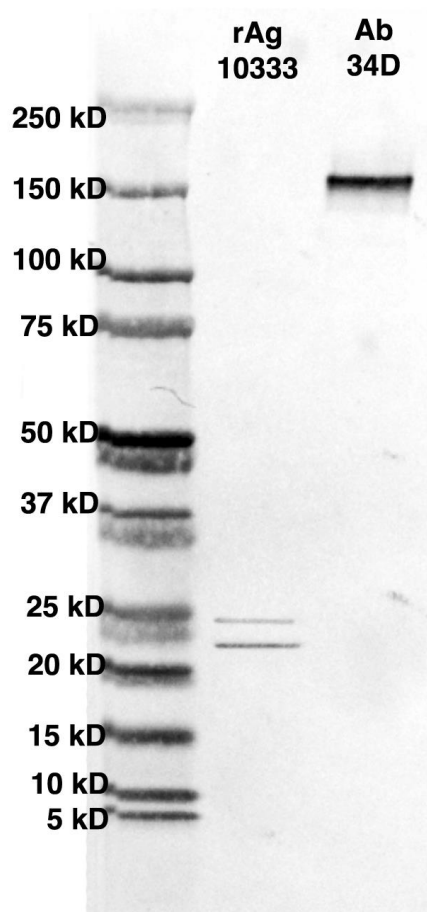


SAIC-34B



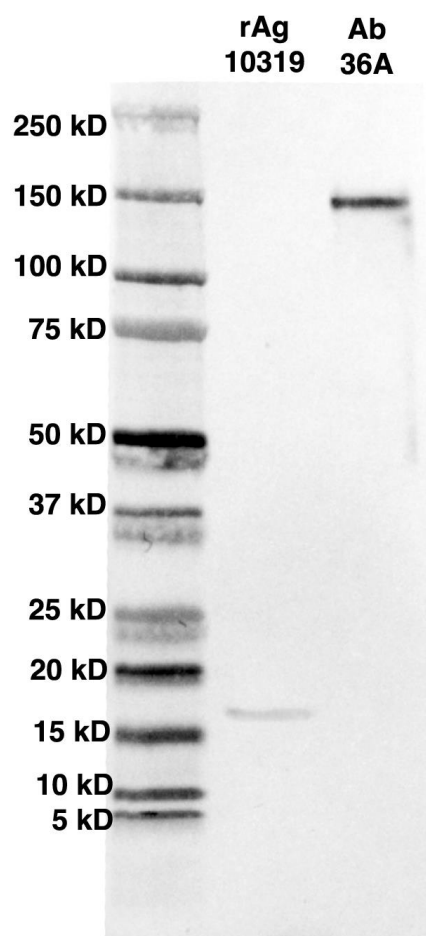
SAIC-34D, PRDX2, GLFIIDGK, expected MW from recombinant protein antigen (rAg) (Argonne National Laboratory, ANL # 10333) = 21.9 kDa.

SAIC-34D

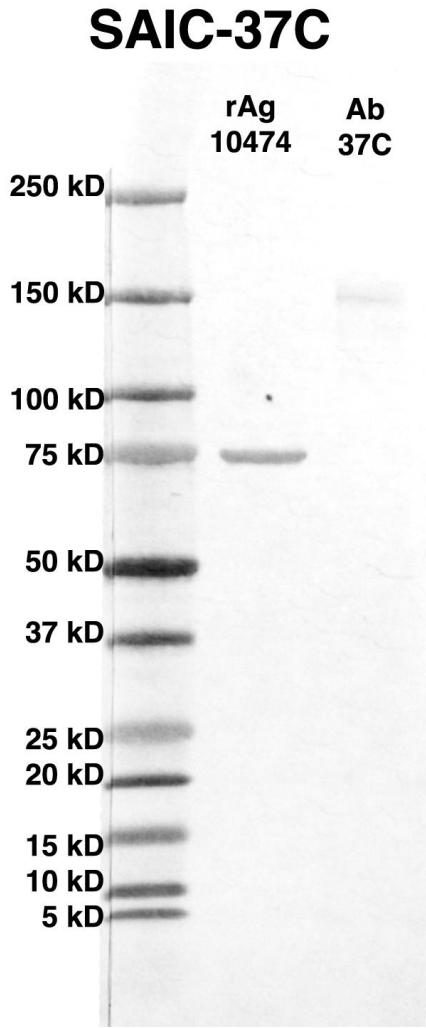


SAIC-36A, UBE2I, DHPFGFVAVPTK, expected MW from recombinant protein antigen (rAg) (Argonne National Laboratory, ANL # 10319) = 18.0 kDa.

SAIC-36A

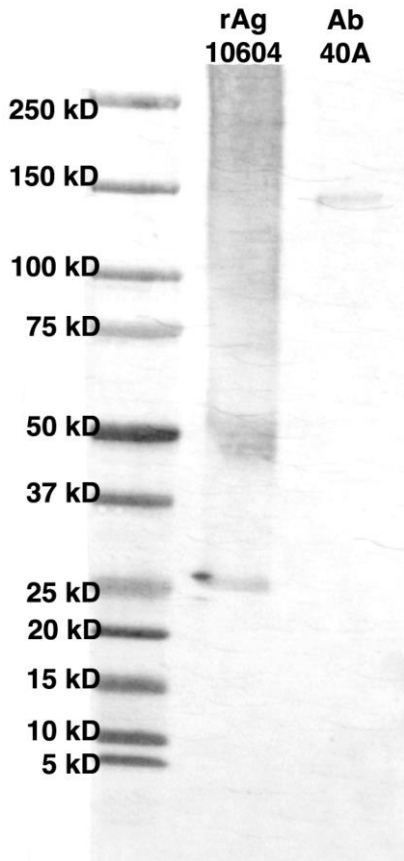


SAIC-37C, EZR, SGYLSSER, expected MW from recombinant protein antigen (rAg) (Argonne National Laboratory, ANL # 10474) = 69.7 kDa.

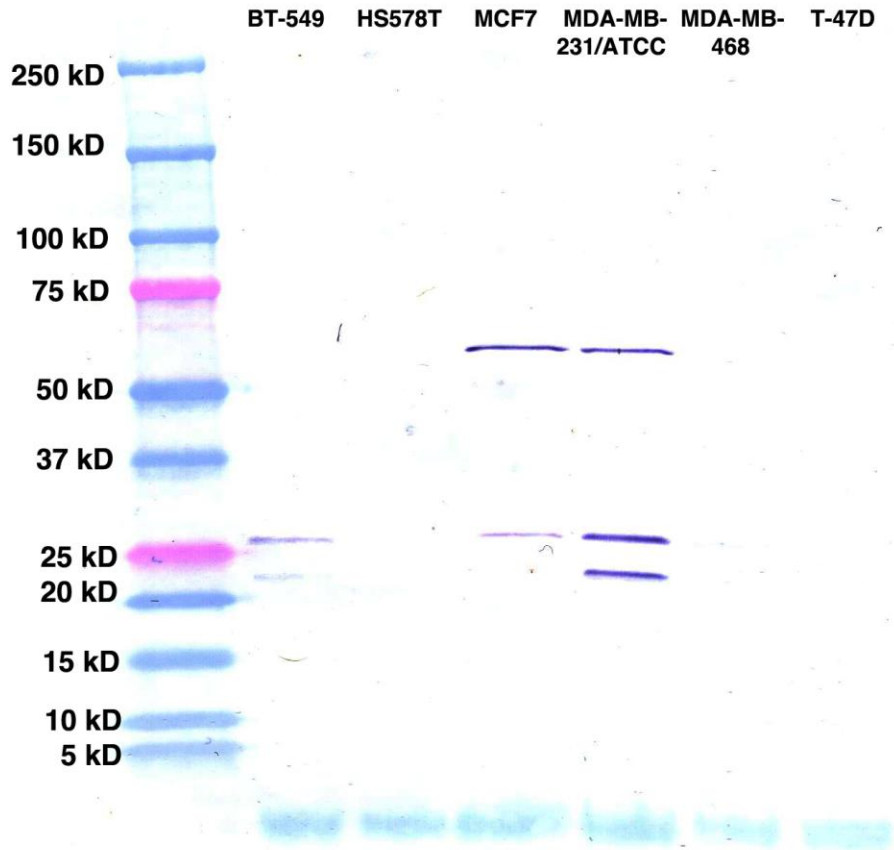


SAIC-40A, PRDX4, QITLNDLPVGR, expected MW from recombinant protein antigen (rAg) (Argonne National Laboratory, ANL # 10604) = 26.8 kDa, UniProt: Protein MW = 31 kDa.

SAIC-40A

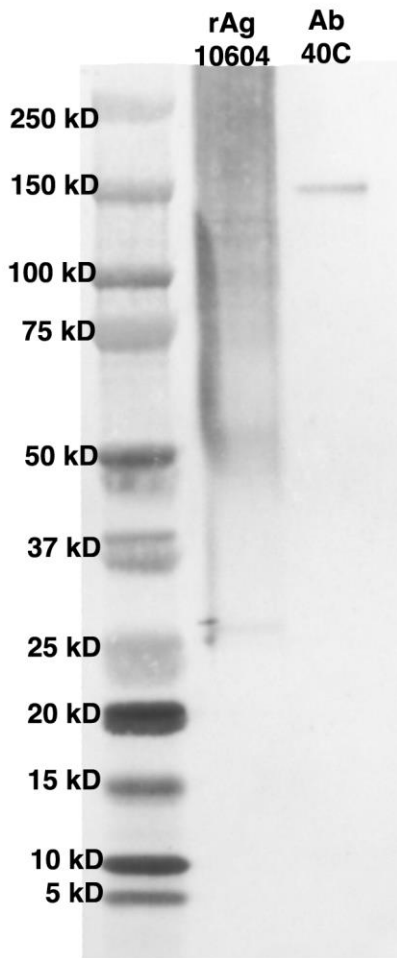


SAIC-40A

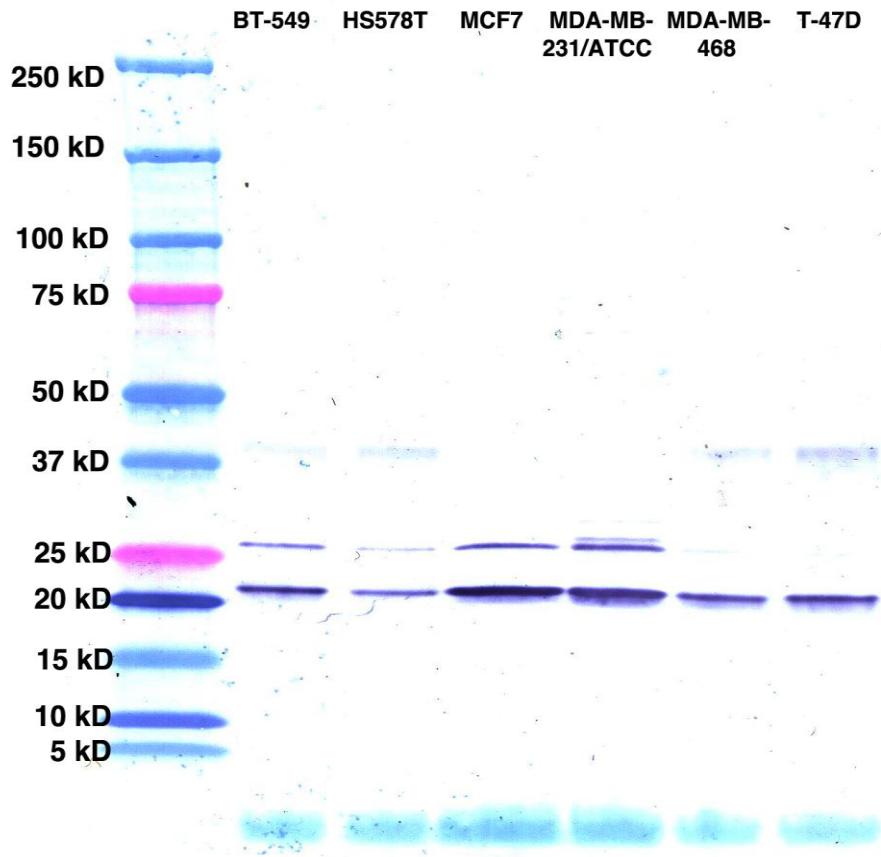


SAIC-40C, PRDX4, LVQAFQYTDK, expected MW from recombinant protein antigen (rAg) (Argonne National Laboratory, ANL # 10604) = 26.8 kDa, UniProt: Protein MW = 31 kDa.

SAIC-40C

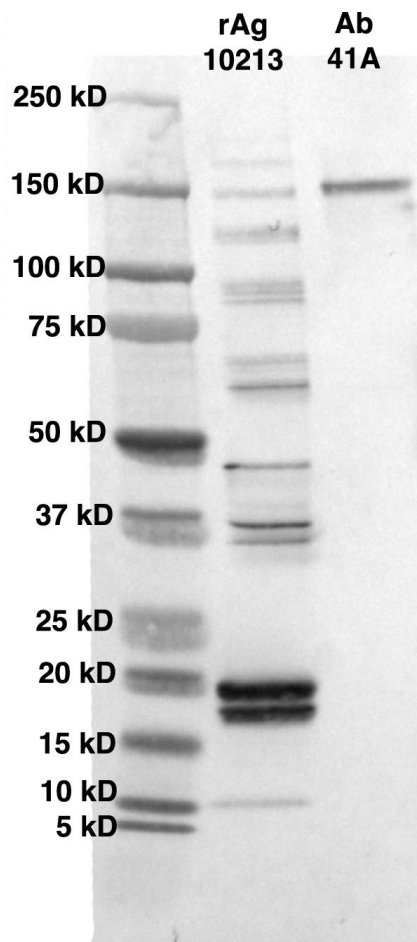


SAIC-40C



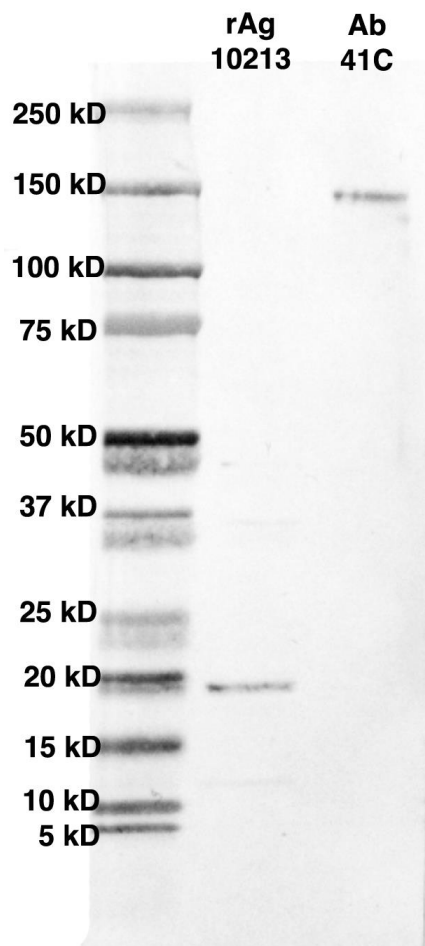
SAIC-41A, UBE2C, GISAFPESDNLFK, expected MW from recombinant protein antigen (rAg) (Argonne National Laboratory, ANL # 10213) = 19.9 kDa.

SAIC-41A

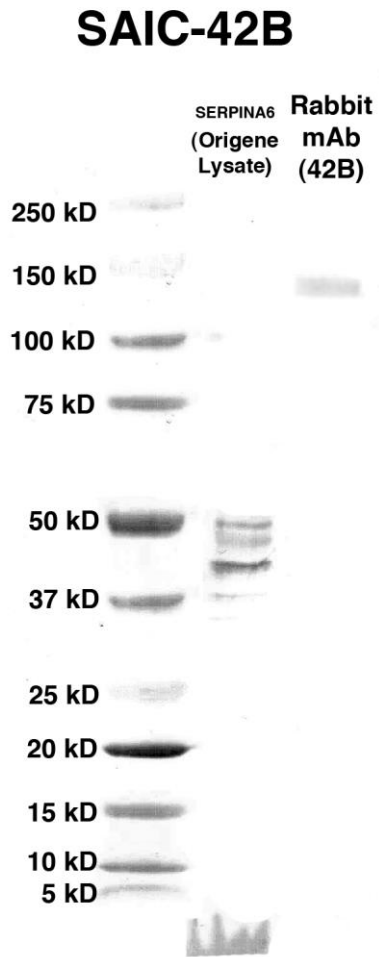


SAIC-41C, UBE2C, LSLEFPSGYYPNAPTVK, expected MW from recombinant protein antigen (rAg) (Argonne National Laboratory, ANL # 10213) = 19.9 kDa.

SAIC-41C

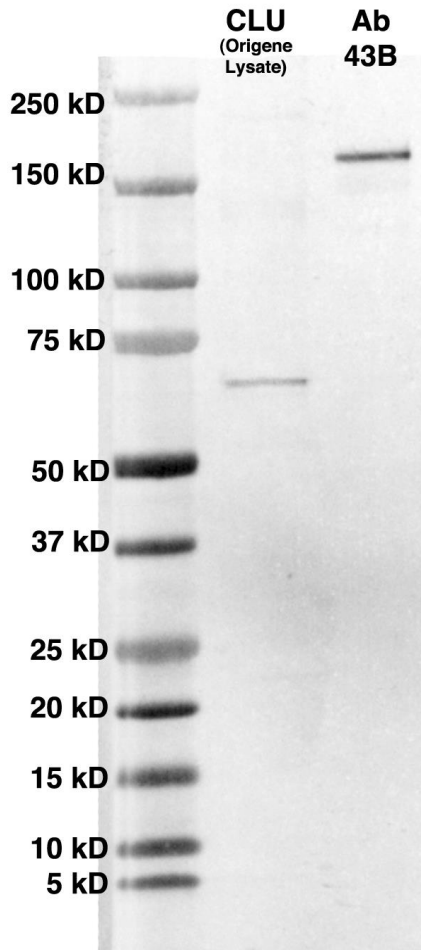


SAIC-42B, SERPINA6, AQLLQGLGFNLTER, expected MW from overexpressed lysate (Origene) = 42.6 kDa.

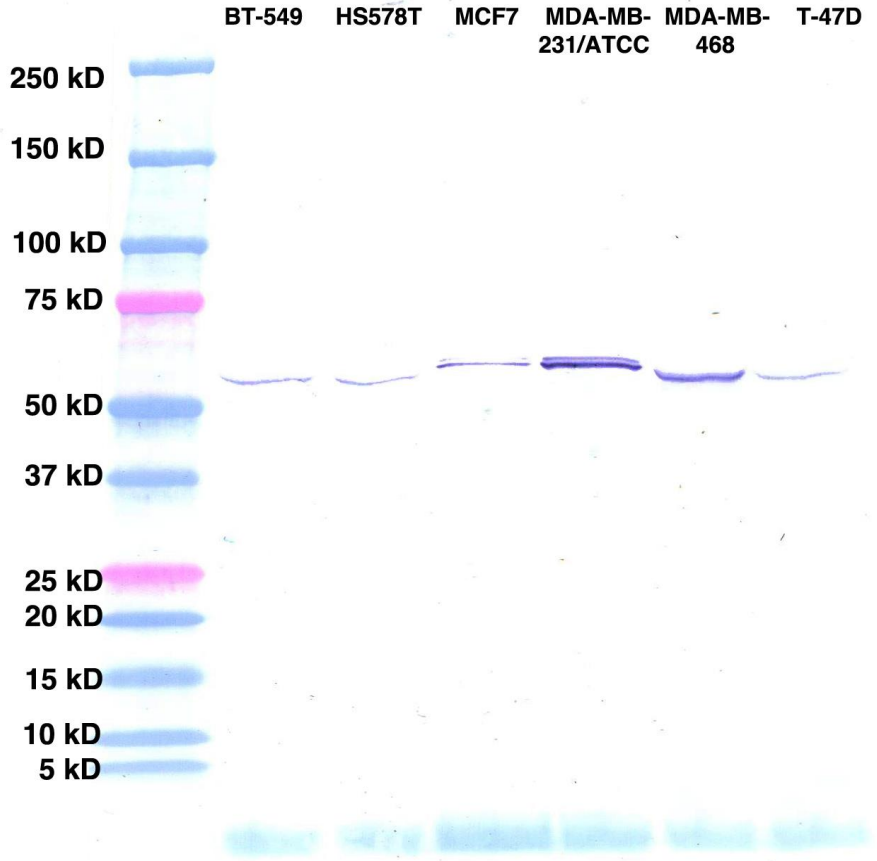


SAIC-43B, CLU, ASSIIDELFQDR, expected MW from overexpressed lysate (Origene) = 50.0 kDa, UniProt: Isoform 1 MW = 52 kDa, Isoform 2 MW = 58 kDa, Isoform 3 MW = 32 kDa, Isoform 4 MW = 49 kDa, Isoform 5 MW = 54 kDa.

SAIC-43B



SAIC-43B



SAIC-103A, MUC1, EGTINVHDTVETQFNQYK, expected MW from overexpressed lysate, variant 2 (Origene) = 25.1 kDa.

SAIC-103A

