

## Background

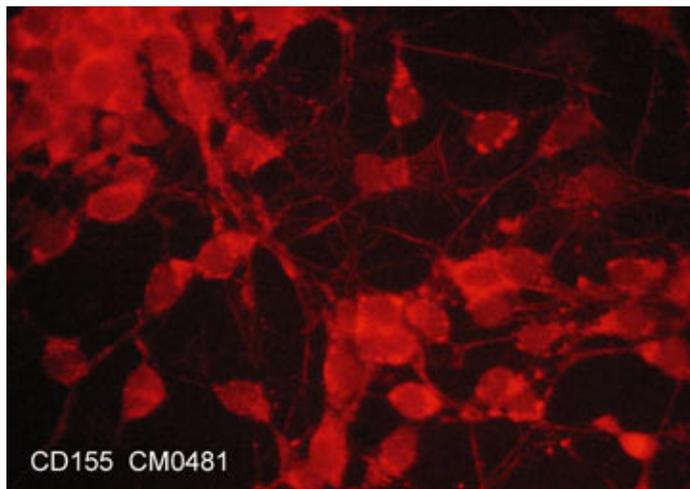
CD155/Poliovirus receptor (PVR)/nectin-like 5 (Necl-5) is a transmembrane glycoprotein with extracellular immunoglobulin like domains, and an intracellular immunoreceptor tyrosine-based inhibitor motif (ITIM). CD155 was originally described as a mediator of poliovirus attachment to cells, but has also been implicated in adherens junction formation. CD155 binds nectin-3, and interacts with integrin  $\alpha\beta 3$  and PDGFR to regulate integrin clustering and focal contact formation at the leading edge of migrating cells. CD155 is also a ligand for immunoreceptors that regulate tumor surveillance. CD155 binds DNAX-associated molecule 1 (DNAX-1), an activating receptor on natural killer cells and cytotoxic T-cells. Alternatively, CD155 may bind TIGIT immunoreceptor inducing an immunosuppressive and non-cytotoxic profile. In cancers, CD155 expression has been associated with unfavorable prognosis in colon cancer, breast cancer, lung adenocarcinoma, pancreatic cancer, melanoma, and glioblastoma. Cancer therapies have targeted CD155 interactions with TIGIT, and have used CD155 as a point of entry for recombinant oncolytic polioviruses.



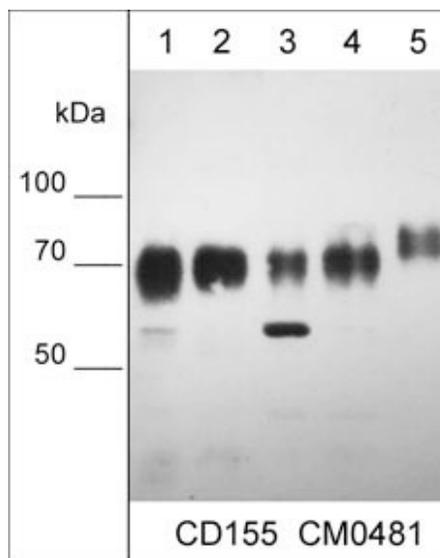
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## Background References

- Gao, J. (2017) *Cancer Sci.* 108(10):1934.  
Molfetta, R. (2020) *Int J Mol Sci.* 21(3):922.



Immunocytochemical labeling of CD155 in aldehyde fixed and NP-40 permeabilized human NCI-H446 small cell lung carcinoma cells. The cells were labeled with mouse monoclonal anti-CD155 (CM0481). The antibody was detected using goat anti-mouse DyLight® 594.



Western blot of human A549 lung carcinoma (lane 1), NCI-H446 small cell lung carcinoma (lane 2), NCI-H1299 lung carcinoma (lane 3), MDA-MB-231 breast carcinoma (lane 4), and A431 epidermoid carcinoma (lane 5). The blot was probed with mouse monoclonal anti-CD155 (CM0481) at 1:500.

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## Immunogen

Uniprot ID: P15151

Clone (M048) was generated from a recombinant protein that included the extracellular region of human CD155 protein.

## Buffer and Storage

Mouse monoclonal antibody purified with protein G chromatography is supplied in 100µl phosphate-buffered saline, 50% glycerol, 1 mg/ml BSA, and 0.05% sodium azide. Store at -20°C. Stable for 1 year.

## Applications

WB	1:1000
ELISA (Cap)	1:100
IP	1:100
ICC	1:100

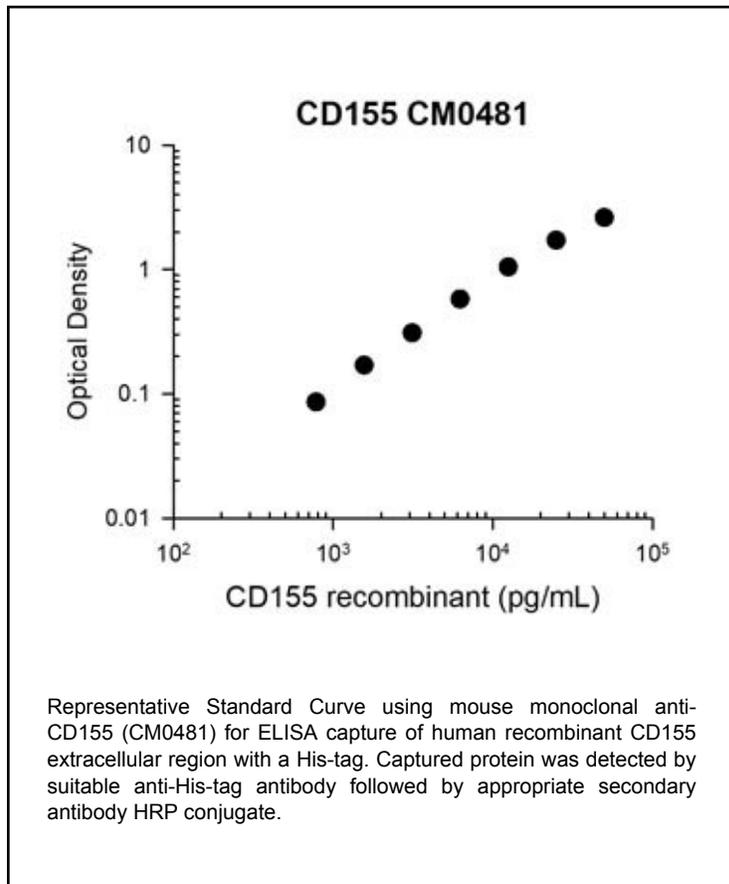
## Species Reactivity

Hu

**Isotype:** IgG1

End user should determine optimal dilution for their particular applications. Western blot membranes were incubated with diluted antibody in 5% non-fat milk, Tris buffer, 0.04% Tween20 for 1 hour at room temperature.

Abbreviations: E = ELISA, ELISA (Cap) = ELISA Capture ICC = immunocytochemistry, IHC = immunohistochemistry, IP = immunoprecipitation, MS = mass spectrometry, WB = western blot.  
Hu = Human, Ms = Mouse, Rt = Rat, Ck = Chicken, F = Frog, B = Bovine



## Specificity

Clone M048 mouse monoclonal antibody detects a 75 kDa\* protein on SDS-PAGE "Native" or denatured immunoblots of human A549, NCI-H466, NCI-H1299, MDA-MB-231 and A431 carcinomas. The antibody detects CD155 in the membranes and cytoplasm in NCI-H446 cells after immunocytochemical labeling. The antibody works for western blot, immunoprecipitation, immunocytochemistry, and ELISA capture.

\*All molecular weights (MW) are confirmed by comparison to MW standards and to western blot mobilities of known proteins with similar MW. "Native" western blot utilizes non-reducing sample buffer (no mercaptoethanol or SDS), normal SDS-PAGE gel electrophoresis, and no methanol in transfer buffers.

## Related Products

- BM0451 B7-H3/CD276 (Extracellular region) Antibody Mouse Monoclonal
- AM0471 Axl/UFO (Extracellular region) Antibody Mouse Monoclonal
- CM0101 CD44 (Extracellular region) Mouse Monoclonal
- CM0261 CD99 (Extracellular region) Mouse Monoclonal
- CM0341 CD63 (Extracellular region) Mouse Monoclonal



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