

## 参考文献

- [1] Joyce JA, Laakkonen P, Bernasconi M, et al. Stage-specific vascular markers revealed by phage display in a mouse model of pancreatic islet tumorigenesis [J]. *Cancer Cell*, 2003, 4(5): 393-403.
- [2] Hoffman JA, Giraudo E, Singh M, et al. Progressive vascular changes in a transgenic mouse model of squamous cell carcinoma [J]. *Cancer Cell*, 2003, 4(5): 383-391.
- [3] Weis SM, Cheresh DA. Tumor angiogenesis: molecular pathways and therapeutic targets [J]. *Nature Medicine*, 2011, 17(11): 1359-1370.
- [4] Di Matteo P, Mangia P, Tiziano E, et al. Anti-metastatic activity of the tumor vascular targeting agent NGR-TNF [J]. *Clinical & Experimental Metastasis*, 2015, 32(3): 289-300.
- [5] Pasqualini R, Koivunen E, Ruoslahti E. Alpha v integrins as receptors for tumor targeting by circulating ligands [J]. *Nat Biotechnol*, 1997, 15(6): 542-546.
- [6] Arap W, Pasqualini R, Ruoslahti E. Cancer treatment by targeted drug delivery to tumor vasculature in a mouse model [J]. *Science*, 1998, 279(5349): 377-380.
- [7] Desgrosellier JS, Cheresh DA. Integrins in cancer: biological implications and therapeutic opportunities [J]. *Nature Reviews Cancer*, 2010, 10(1): 9-22.
- [8] Porkka K, Laakkonen P, Hoffman J A, et al. A fragment of the HMG2 protein homes to the nuclei of tumor cells and tumor endothelial cells *in vivo* [J]. *Proc Natl Acad Sci USA*, 2002, 99(11): 7444-7449.
- [9] Laakkonen P, Porkka K, Hoffman J A, et al. A tumor-homing peptide with a targeting specificity related to lymphatic vessels [J]. *Nat Med*, 2002, 8(7): 751-755.
- [10] Zhang WJ, Sui YX, Budha A, et al. Affinity peptide developed by phage display selection for targeting gastric cancer [J]. *World J Gastroenterol*, 2012, 18(17): 2053-2060.
- [11] Li ZJ, Cho CH. Peptides as targeting probes against tumor vasculature for diagnosis and drug delivery [J]. *J Transl Med*, 2012, 10(Suppl 1): S1.
- [12] Zhi M, Wu K, Hao Z, et al. Screening of specific binding peptide targeting blood vessel of human esophageal cancer *in vivo* in mice [J]. *Chinese Med J*, 2011, 124(4): 581-585.
- [13] McCafferty J, Schofield D. Identification of optimal protein binders through the use of large genetically encoded display libraries [J]. *Curr Opin Chem Biol*, 2015, 26C: 16-24.
- [14] Lam KS, Salmon SE, Hersh EM, et al. A new type of synthetic peptide library for identifying ligand-binding activity [J]. *Nature*, 1991, 354(6348): 82-84.
- [15] Bononi FC, Luyt LG. Synthesis and cell-based screening of One-Bead-One-Compound Peptide Libraries [J]. *Peptide Libraries: Methods and Protocols*, 2015: 223-237.
- [16] Gao Y, Amar S, Pahwa S, et al. Rapid lead discovery through iterative screening of One Bead One Compound Libraries [J]. *ACS Combinatorial Science*, 2014, 17(1): 49-59.
- [17] Garcia-Martin F, Matsushita T, Hinou H, et al. Fast epitope mapping for the anti-MUC1 monoclonal antibody by combining a One-Bead-One-Glycopeptide Library and a Microarray Platform [J]. *Chemistry-A European Journal*, 2014, 20(48): 15891-15902.
- [18] Liang S, Zhou Q, Wang M, et al. Water-soluble L-cysteine-coated FePt nanoparticles as dual MRI/CT imaging contrast agent for glioma [J]. *Int J Nanomedicine*, 2015, 10: 2325-2333.
- [19] Kim JH, Lee JS, Kang KW, et al. Whole-body distribution and radiation dosimetry of <sup>68</sup>Ga-NOTA-RGD, a positron emission tomography agent for angiogenesis imaging [J]. *Cancer Biotherapy and Radiopharmaceuticals*, 2012, 27(1): 65-71.
- [20] Chen K, Ma W, Li G, et al. Synthesis and evaluation of <sup>64</sup>Cu-labeled monomeric and dimeric NGR peptides for MicroPET imaging of CD13 receptor expression [J]. *Molecular Pharmaceutics*, 2012, 10(1): 417-427.
- [21] Lee S, Kang SW, Ryu JH, et al. Tumor-homing glycol chitosan-based optical/PET dual imaging nanoprobe for cancer diagnosis [J]. *Bioconjugate Chemistry*, 2014, 25(3): 601-610.
- [22] Arap W, Pasqualini R, Ruoslahti E. Chemotherapy targeted to tumor vasculature [J]. *Current Opinion in Oncology*, 1998, 10(6): 560-565.
- [23] Yang Y, Yan Z, Wei D, et al. Tumor-penetrating peptide functionalization enhances the anti-glioblastoma effect of doxorubicin liposomes [J]. *Nanotechnology*, 2013, 24(40): 405101.
- [24] Dai W, Yang T, Wang Y, et al. Peptide PHSCNK as an integrin  $\alpha 5 \beta 1$  antagonist targets stealth liposomes to integrin-overexpressing melanoma. *Nanomedicine: Nanotechnology [J]. Biology and Medicine*, 2012, 8(7): 1152-1161.
- [25] Jiang W, Jin G, Ma D, et al. Modification of cyclic NGR tumor neovasculature-homing motif sequence to human plasminogen kringle 5 improves inhibition of tumor growth [J]. *PLoS One*, 2012, 7(5): e37132.
- [26] Ma JL, Wang H, Wang YL, et al. Enhanced peptide delivery into cells by using the synergistic effects of a cell-penetrating peptide and a chemical drug to alter cell permeability [J]. *Mol Pharmaceutics*, 2015, 12(6): 2040-2048.
- [27] Nehoff H, Parayath NN1, Domanovitch L, et al. Nanomedicine for drug targeting: strategies beyond the enhanced permeability and retention effect [J]. *International Journal of Nanomedicine*, 2014, 9: 2539-2555.
- [28] Gao H, Zhang Q, Yang Y, et al. Tumor homing cell penetrating peptide decorated nanoparticles used for enhancing tumor targeting delivery and therapy [J]. *International Journal of Pharmaceutics*, 2015, 478(1): 240-250.
- [29] Gautam A, Kapoor P, Chaudhary K, et al. Tumor homing peptides as molecular probes for cancer therapeutics, diagnostics and theranostics [J]. *Current Medicinal Chemistry*, 2014, 21(21): 2367-2391.
- [30] Wu J, Zhao J, Zhang B, et al. Polyethylene glycol-poly(lactic acid) nanoparticles modified with cysteine-arginine-glutamic acid-lysine-alanine fibrin-homing peptide for glioblastoma therapy by enhanced retention effect [J]. *International Journal of Nanomedicine*, 2014, 9: 5261-527.
- [31] Zhao J, Zhang B, Shen S, et al. CREKA peptide-conjugated dendrimer nanoparticles for glioblastoma multiforme delivery [J]. *J Colloid Interface Sci*, 2015, 450: 396-403.
- [32] Huang RY, Chiang PH, Hsiao WC, et al. Redox-sensitive polymer/SPIO nanocomplexes for efficient magnetofection and MR imaging of human cancer cells [J]. *Langmuir*, 2015 [Epub ahead of print].
- [33] Alkilany AM, Boulos SP, Lohse SE, et al. Homing peptide-conjugated gold nanorods: the effect of amino acid sequence display on nanorod uptake and cellular proliferation [J]. *Bioconjugate Chemistry*, 2014, 25(6): 1162-1171.
- [34] Chung EJ, Cheng Y, Morshed R, et al. Fibrin-binding, peptide amphiphile micelles for targeting glioblastoma [J]. *Biomaterials*, 2014, 35(4): 1249-1256.
- [35] Pastorino F, Brignole C, Loi M, et al. Nanocarrier-mediated targeting of tumor and tumor vascular cells improves uptake and penetration of drugs into neuroblastoma [J]. *Front Oncol*, 2013, 3: 190.
- [36] Sha H, Zou Z, Xin K. Tumor-penetrating peptide fused EGFR single-domain antibody enhances cancer drug penetration into 3D multicellular spheroids and facilitates effective gastric cancer therapy [J]. *J Control Release*, 2015, 200: 188-200.
- [37] Craik DJ, Fairlie DP, Liras S. The future of peptide-based drugs [J]. *Chem Biol Drug Des*, 2013, 81: 136-144.

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